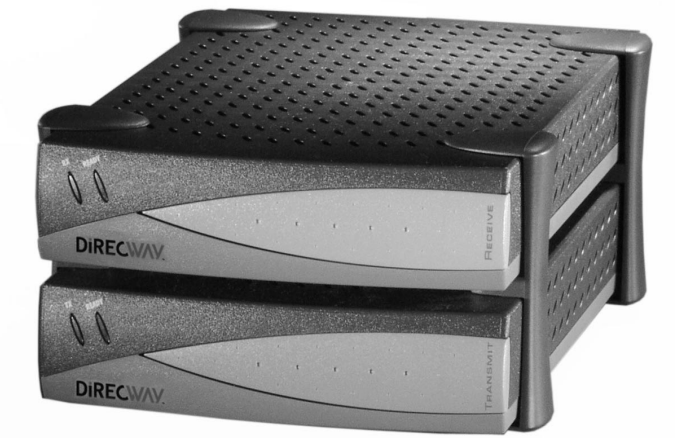
DIRECWAY®

Installation Guide
for Indoor Equipment and Software



DW4000

Release 4.2.1

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Safety information

Cautions and notes, defined as follows, are used throughout this guide to help you become familiar with possible safety and equipment hazards.

⚠ CAUTION
Indicates a hazard or unsafe practice that might result in moderate or minor personal injury.

CAUTION
Indicates a hazard or unsafe practice that might result in property damage.

Note: A note presents additional information.

Contents

Introduction 1
Release 4.2.1 1
Antenna and outdoor equipment 2
Organization of this manual 3
System requirements 3
Related documentation 4
Pre-installation 5
Hardware 5
Software 5
Upgrading to a new release 7
Upgrade scenarios and required actions 7
Note your ISP information 8
Uninstall procedure 8
Installing the system 13
Professional installation or service requirement 14
Items required for installation 15
The five-step installation process 16
The two different power supplies 17
.The two satellite modems 17
Assembling the satellite modem components 18
Installing the software 21
Registering your system for service 25
Recommissioning the system for a new install 27
Recommissioning the system for an upgrade 28
Surfing 38
Verifying connection through the satellite 40
DIRECWAY help tools 40
The Antenna Pointing - Transmitter screens 42
Troubleshooting the modem lights 43
Configuring Microsoft Internet Explorer and Outlook Express 45
FAQs 57
Other help resources 57

Accessing the user guides. 58
Getting Started help tool. 59
The DIRECWAY Navigator icon 60
DIRECWAY Help 61
myDIRECWAY.com 62
Using DW email. 64
Manage Email Account 65
Configure Email Client. 65
FAQs 65
What is the difference between WebSetup and registering? 65
What is the difference between DIRECWAY and DirecPC?. 65
What do I do if my DW icon doesn't appear in the system tray? 66
What geographic area is covered by the service?. 66
Where can I get the latest version of the software? 66
Can I use the same dish for DIRECWAYand DIRECTV?. 66
Why must the satellite dish be professionally installed? 66
If the system transmits and receives, why do I need a modem?. 67
What are the causes of interference in the operation of my system? 67
How can I add more e-mail accounts after commissioning? 67
Why does Windows ask for a password each time I restart my computer now that I installed the software? How can I change this?. 68
How do I install Dial-up Networking? 70
What is Automatic Cross Polarization (ACP)? 71
Why is the Turbo Internet Properties screen displayed when I try to access the Internet in terrestrial mode? 72
How can I ensure that the system will fall back to a modem? 74
Correcting the modem detection failure. 76

Warranty 79

Modem 79
Antenna 80
Limited warranty 80
Customer remedies. 80
Disclaimer of warranty. 82
Declaration of conformity 84

Introduction 1

This guide explains how to set up your DIRECWAY Two-Way system. This system receives data from, and transmits data to, the satellite for access to the Internet. It uses a receive modem to receive data and a transmit modem to transmit data. Figure 1 illustrates the modems.

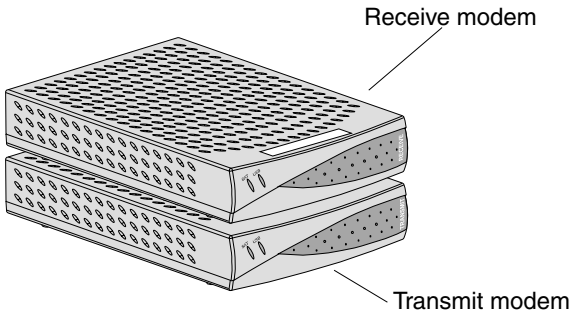

Figure 1: The two-way system modems

Release 4.2.1

The major new features for this release are:

Getting Started - a quick start guide that introduces you to DIRECWAY and helps you start using your service. You can find out about new features, useful information, and support resources. This guide is first displayed as a Welcome Page at the conclusion of installation and is available later at any time through a link on the desktop.

TurboPage - speeds up web browsing by performing a prefetch of subpages to eliminate satellite round trip delays.

Satellite-based Commissioning - eases the registration process by eliminating the need to use a phone line. This enables your installer to set up your equipment faster.

Antenna and outdoor equipment

The indoor modems connect to the satellite through an antenna and outdoor equipment as shown in Figure 2

Note: Professional installation and service of your two-way system satellite dish assembly is required by the Federal Communications Commission.

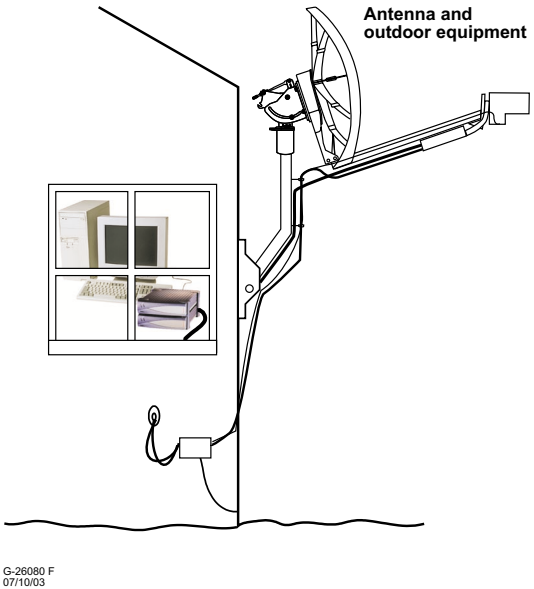

Figure 2: Typical antenna and outdoor equipment

Organization of this manual

- **Pre-installation**, on page 5, describes software and hardware preparation.
- **Upgrading to a new release**, on page 7, describes when to uninstall previous releases
- **Installing the system**, on page 13, describes the step-by-step installation process
- **FAQs**, on page 57, provide answers to frequently asked questions.

Note: To receive the latest information not contained in this manual, read the `ReadMeFirst` packaged with the installation CD before you use the DIRECWAY software.

System requirements

Please verify that your computer system meets the following requirements before proceeding.

- Pentium II with a 333 MHz processor or better
- Windows 98 Second Edition (SE), Windows Millennium (Me), Windows 2000 Professional, or Windows XP
- 64 MB RAM (98 SE and Me), 128 MB RAM (Windows 2000 and XP)
- 800x600 pixel display or better
- CD-ROM drive
- PCI or AGP video adapter
- 20 MB free hard disk space
- Available USB port
- 56 kbps modem
- Analog telephone line for system setup (optional)

Related documentation

Installation of this product requires the use of one or more of the following antenna or outdoor unit manuals:

- *DIRECWAY Satellite Dish Installation Guide Model: DW4000 Two-Way Ku Antenna for Enterprise Mounts, Model AN6-074* (HNS 1032914-0001)
- *DIRECWAY Satellite Dish Installation Guide Model: DW4000 Two-Way Ku Antenna for Enterprise Mounts, Model AN4-074* (HNS 1033833-0001)
- *DIRECWAY Outdoor Unit Installation Guide DW 4000-098 DW 4000-120* (HNS 1032025-0001)
- *.89/.98M Ku-Band Rx/Tx Series 1892/1982 Antenna System Assembly Manual* (Prodelin 4906-629)
- *1.2m Ku-Band Rx/Tx Series 1132 Antenna System* (Prodelin 4906-630)

Pre-installation 2

Hardware

- When assembling the system, place the **receive modem on top** of the transmit modem to aid heat dissipation.
- Use a **surge protector** to protect against electrical power surges.
- **Do not** connect the receive modem to the USB port on your computer prior to beginning the software installation. The software prompts you when it is time to do this.
- For two-way operation, the only time you need to use a **telephone modem** is during the WebSetup portion of the software installation (with the exception of using dial-up as a backup).
- **Previous releases** of DirecPC system hardware (such as PCI card or DVB USB modems) cannot coexist with the satellite DIRECWAY modems and must be uninstalled.

Software

- Always back up your computer system prior to upgrading or installing new software.
- Verify that all applications are closed prior to beginning the software installation.
- In this manual, **DW** refers to the navigation icon in the Windows system. It is circled in Figure 3.

Note: The navigation icon may have a different appearance depending on your system provider.

Figure 3: The DW icon

- If you are installing the system for the first time, or are upgrading an earlier version of release 4.0, proceed to *Installing the system* on page 13. If releases of system software prior to release 4.0 (including Powered By partner releases prior to 4.0) are installed on your computer, you must uninstall them before installing the current release. See *Upgrading to a new release* on page 7.

Upgrading to a new release 3

If this is a **new installation**, go to *Installing the system* on page 13.

If you are **upgrading from any version of release 4.0,** go to *Installing the system* on page 13.

If you are **upgrading from any version of release 3.0 or lower**, complete all the instructions in this chapter.

Previous releases of DirecPC system **hardware** must be uninstalled.

Upgrade scenarios and required actions

Your Windows configuration determines how you perform the software installation. The table below describes the various upgrade scenarios and the actions you must perform.

Upgrade scenario	Upgrade solution/action
This is the first time you are installing the system, or you have an earlier version of release 4.0 installed.	Proceed to *Installing the system* on page 13.
You have a previous release of the DirecPC software (3.0 or lower) installed on Windows 98 Second Edition (SE), Millennium (Me), or 2000 Professional.	You must uninstall the previous release of the software and hardware completely before installing the current release. Complete the steps described in this section.
You have a previous release of the DirecPC software (3.0 or lower) installed on Windows 95, 98 (first edition), or NT.	The current software supports Windows 98 SE, Millennium, 2000 Professional, and XP. You have two options: • Uninstall the previous release of the software and then upgrade your operating system to either Windows 98 SE, Me, 2000 Professional, or XP. • Perform a new installation of Windows 98 SE, Me, 2000 Professional, or XP then proceed with current release installation. A new installation consists of formatting your hard disk, which removes all software. **Backup your hard disk before formatting.**

Note your ISP information

It is important that you record your Internet service provider (ISP) account information before uninstalling the software. This information may be required during the installation of your new software. To obtain the information, right-click the **NAV** icon in the system tray figure as shown in Figure 4. Then select **Turbo Internet Properties**.

1. Under the **Dialup Properties** tab find the ISP Access phone number.

ISP Access Phone Number	

2. Under the **Protocols Properties** tab find your User Name.

User Name	

You need to know your password.

Uninstall procedure

1. If you have a previous release (3.0 or lower) of software running, right click the **NAV** icon. A menu appears. See Figure 4.

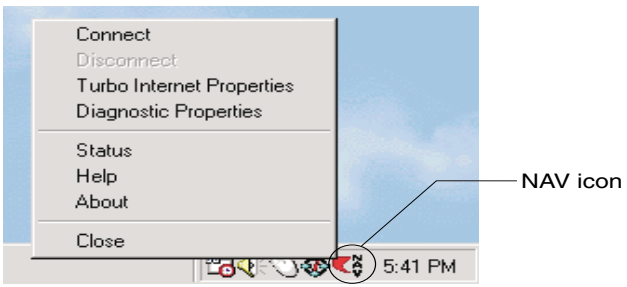

Figure 4: Right-clicking NAV

2. Select **Close** to close the Navigator program.
3. Select **Start**—*Setting*—*Control Panel* and double click the **Add/Remove Programs** icon. See Figure 5.

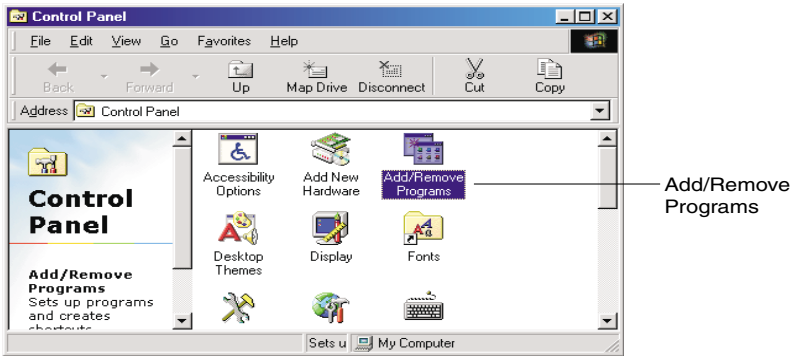

Figure 5: Double-clicking the Add/Remove Programs icon

Note: The figures in this manual may differ somewhat from what you see on your screen. This is because of the differences between operating systems.

4. The **Add/Remove Programs Properties** window is displayed (see Figure 6). In the **Install/Uninstall** tab, select **DirecPC**.

5. Click the **Add/Remove** button to remove the program.
   Note: In Windows 2000 Professional, the Add/Remove screen is slightly different. Select **DirecPC** under **Currently installed programs** and then click **Change/Remove**.

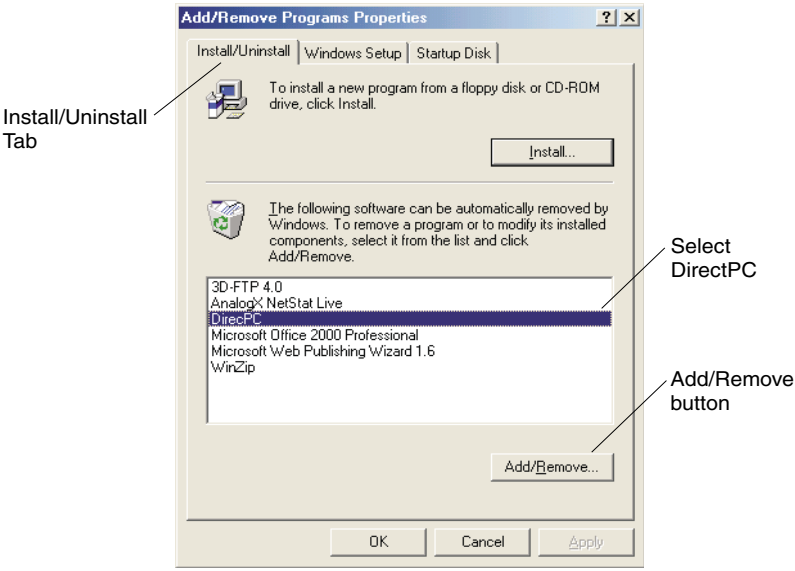

Figure 6: Removing the software

6. After the uninstall process is over, the operating system will ask if you want to restart the computer. Click **No. Do not click Yes.** Manually shut down the computer by selecting **Start**—*Shut Down*.

7. With the computer powered down, manually remove the old satellite modem receiver (which may have been either a PCI card or USB modem receiver). This prevents the computer from asking to install the old satellite modem receiver upon restart.
   - You must open your computer to manually remove the PCI satellite adapter card from the PCI slot. Ground yourself and remove the card following the instructions that came with your computer.
   - To remove your old satellite modem receiver, disconnect the USB cable from the back of the computer.

Installing the system 4

Note: Before installing any part of your DIRECWAY system, please read the **ReadMeFirst** document and print the user guides from the Installation CD to aid you during installation. The **ReadMeFirst** file may have updates made after this and other guides were released.

This chapter addresses the following installation topics:

- Professional installation or service requirement on page 14
- Items required for installation on page 15
- The five step installation process on page 16
- The two different power supplies on page 17
- The two satellite modems on page 17
- Assembling the satellite modem components on page 18
- Installing the software on page 21
- Registering your system for service on page 25, including:
  - Commissioning your system using either Satellite Based Commissioning or Dial-Up Commissioning
  - Entering the Site Account Number (SAN)
  - Creating e-mail accounts, and
  - Viewing the DIRECWAY Getting Started help tool
- The DIRECWAY Help tools on page 40
- Surfing on page 38
- The Antenna Pointing-Transmitter screens on page 42
- The modem lights pattern on page 43
- Configuring Microsoft Internet Explorer and Outlook Express on page 45.

Professional installation or service requirement

Professional installation and service of the two-way satellite dish assembly is required by the Federal Communications Commission.

The two-way satellite dish assembly must be installed in a location or manner not readily accessible to children.

The two-way satellite dish assembly must be installed at least 5 feet (1.5 meters) above ground level or any nearby surface on which a person could sit or stand.

⚠ CAUTION

- **The two-way satellite dish assembly emits radio frequency energy when in the transmit mode.**
- **Unplug indoor power connection before performing maintenance or adding upgrades to any satellite dish components.**
- **To avoid risk of injury, do not place head or other body parts between feed horn and reflector when system is operational.**

Items required for installation

You need all the items shown below. They are in your software installation kit or in a small box inside your satellite dish box.

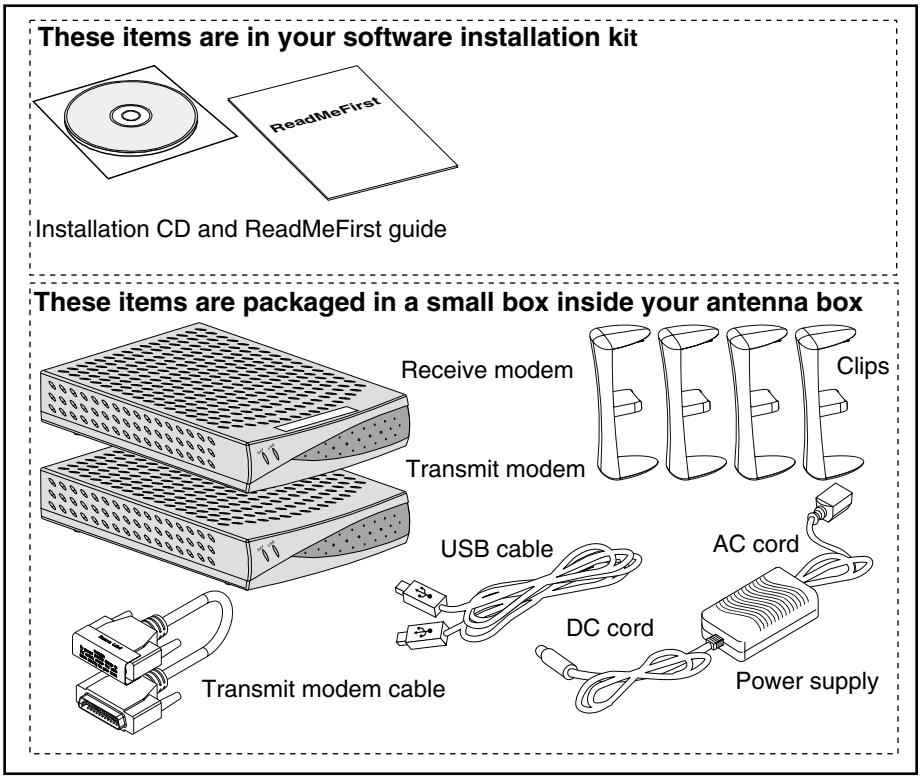

Figure 7: Items required for installation

Note: All user guides are on the installation CD. HNS recommends that you print all of the guides that are applicable to your equipment before you start installation. The ReadMeFirst document will have the latest information on your product.

The five-step installation process

Installing the two-way system is a five-step process:

1. Have a professional satellite system installer assemble, install, and point your satellite dish and run the cables from the outside components to the inside components. The installer fine-tunes your satellite dish for transmission operations to ensure that no interference is caused to other satellite users.
2. You or the professional installer assembles the satellite modem components on page 18.
3. You or the professional installer installs the software on page 21.
4. You or the professional installer registers your account on page 25.
5. Power up and surf.

The professional installer performs the entire installation with your permission. If you would rather install the software yourself, the professional installer coaches you through the process.

See page 45 for instructions on how to configure e-mail and optimize your browser.

You need to have an analog telephone modem connection to register the system. After installation the telephone modem is not needed but can be used as a backup.

> **Notes:** The receive modem must be installed on top of the transmit modem.
>
> Because this satellite dish is transmit capable, it must be professionally installed.
>
> Do not connect the USB cable to the computer until instructed to do so during software installation. Make sure your professional installer labels your receiver coaxial cable and your transmitter coaxial cable.

The two different power supplies

Verify that you are using the correct power supply.

For the two-way system, the part number should be either P/N:1029075-0001 (domestic use only) or 1030875-0001 (domestic and international use). See Figure 9.

If your power supply part number is P/N: 1029076-0001, you have the wrong power supply (it can only be used with the one-way system). Call customer service for help

⚠ CAUTIONS

- **When power needs to be removed from the receive modem, ALWAYS unplug the ac power cord from either the wall outlet, surge protector, or power strip.**
- **NEVER pull the power cord from the back of the receive modem. Doing so could damage the pins and also cause a short in the system.**
- **The power supply with the part number 1029075-0001 is to be used only in the United States and Canada.**
- **This unit must be used with 110-volt ac input.**
- **Other countries may have different standards and requirements.**

The two satellite modems

There are two satellite modems: the receive modem and transmit modem. The receive modem receives data via satellite. It is labeled **Receive** on its front right. The transmit modem transmits data via the satellite. It is labeled **Transmit** on its front right. To aid heat dissipation, install the receive modem on top of the transmit modem.

Assembling the satellite modem components

Follow the steps below and refer to the illustrations on page 18 through page 20 to assemble the satellite modem components. Remember that the receive modem goes on top of the transmit modem. After assembling the components, install the software.

Note: Do not connect the USB cable to your computer until instructed to do so during software installation.

1. Be sure your power supply is not plugged into your wall outlet, surge protector, or power strip.
2. Snap the four clips under the feet of the receive and transmit modems. Mount the clip so that the mounting tab slides over the feet on the bottom of the each modem as shown in Figure 8.

   Note: The transmit modem has a hole at the center of the four feet. The mounting clip tabs snap into place when they are properly aligned over this hole.

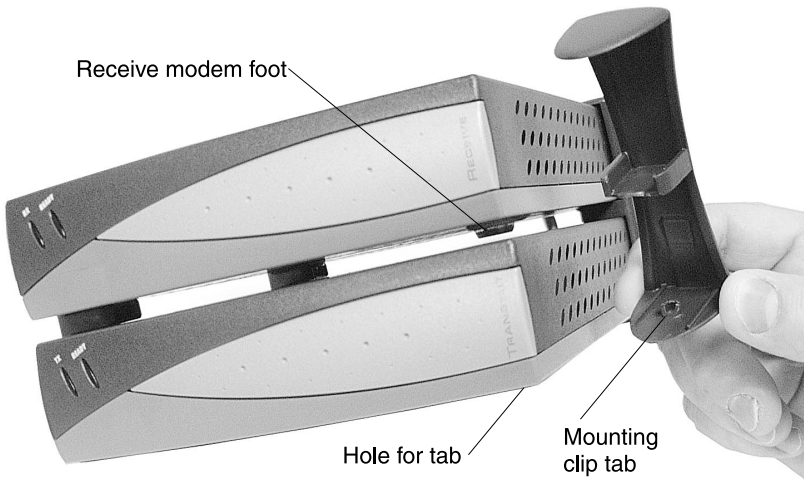

Figure 8: Install clips

3. Connect all cables to the back of your transmit modem and receive modem. Connect the power supply DC cord to your receive modem as well. See Figures 9, 10, and 11. *Do not connect the USB cable to your computer at this time.*
4. Ensure that the ac power cord is tightly connected to the power supply.
5. Plug the power supply ac power cord into a 110-volt wall outlet, power strip, or surge protector. The lights on the front of your receive modem blink between READY and receive (RX).
6. Make sure the computer modem is connected to an analog telephone line.

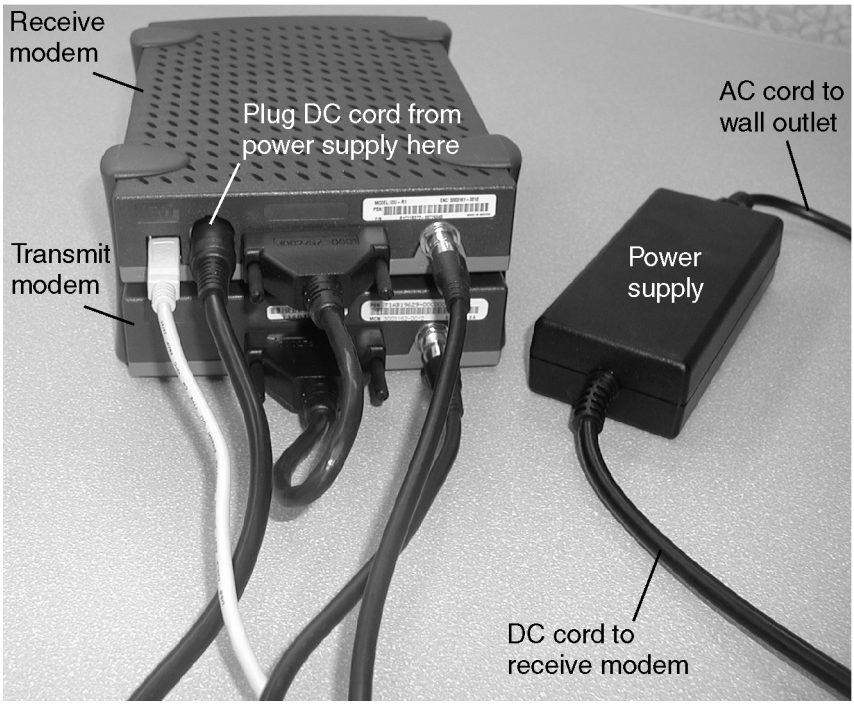

Figure 9: Installing the power supply

Note: Do not connect the USB cable to the computer until instructed to do so during software installation.

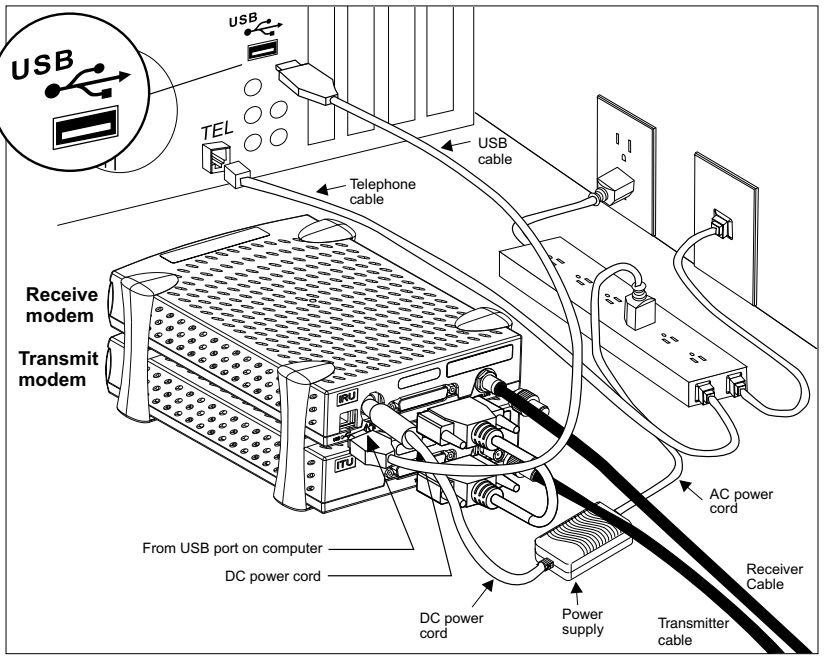

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Figure 10: Receive modem and transmit modem cabling

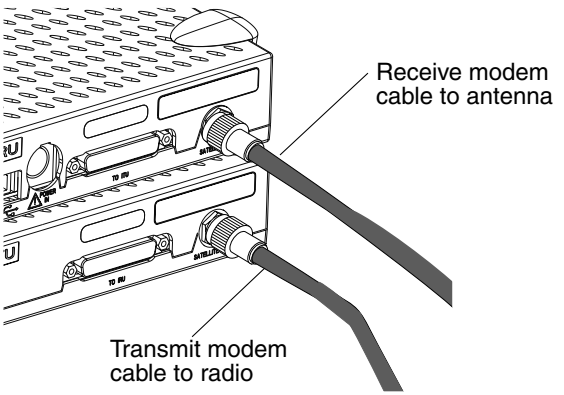


Figure 11: Installing the coaxial cables

Installing the software

1. With Windows running, insert the DIRECWAY CD into the CD-ROM drive. The installation screen appears. See Figure 12.
   Note: If the installation screen does not appear, launch Windows Explorer and click your CD-ROM drive letter. In the window that appears, double-click **Setup** to launch the installation screen.

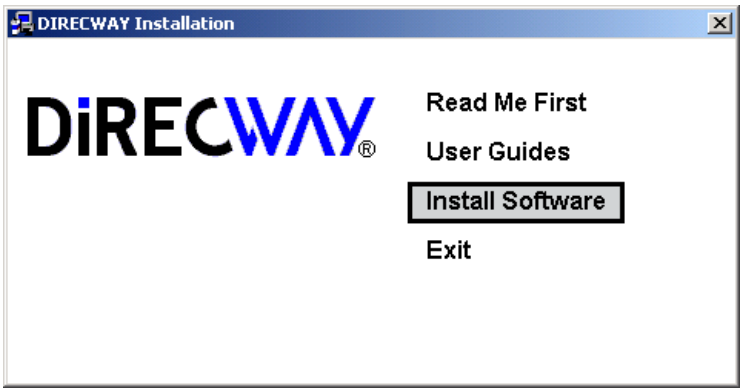


Figure 12: Installation screen

2. Click **Install Software**. The **Setup** screen is displayed as shown in Figure 13. Click **Next**.

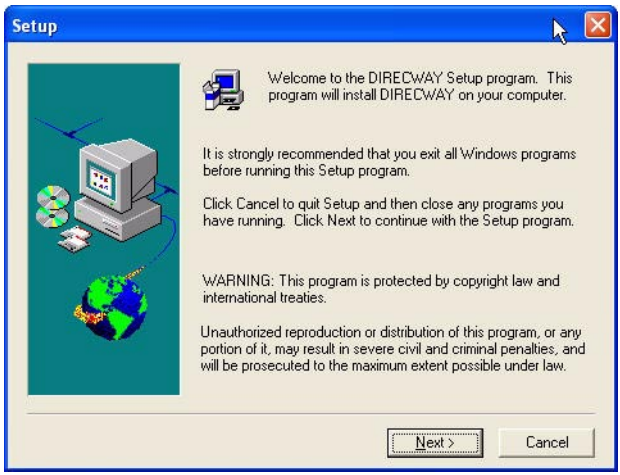
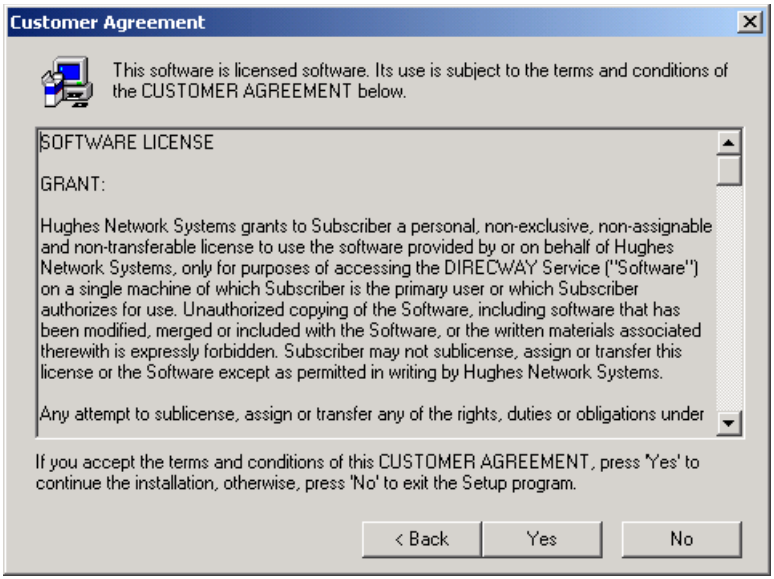

Setup
Welcome to the DIRECWAY Setup program. This program will install DIRECWAY on your computer.
It is strongly recommended that you exit all Windows programs before running this Setup program.
Click Cancel to quit Setup and then close any programs you have running. Click Next to continue with the Setup program.
WARNING: This program is protected by copyright law and international treaties.
Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under law.
Next >
Cancel

Figure 13: Setup welcome screen

3. When the customer agreement screen appears, click **Yes** to accept the agreement.


Customer Agreement
This software is licensed software. Its use is subject to the terms and conditions of the CUSTOMER AGREEMENT below.
SOFTWARE LICENSE
GRANT:
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Any attempt to sublicense, assign or transfer any of the rights, duties or obligations under
If you accept the terms and conditions of this CUSTOMER AGREEMENT, press 'Yes' to continue the installation, otherwise, press 'No' to exit the Setup program.
< Back
Yes
No

Figure 14: Customer agreement screen

4. The **Device Installation Status** screen appears. See Figure 15.

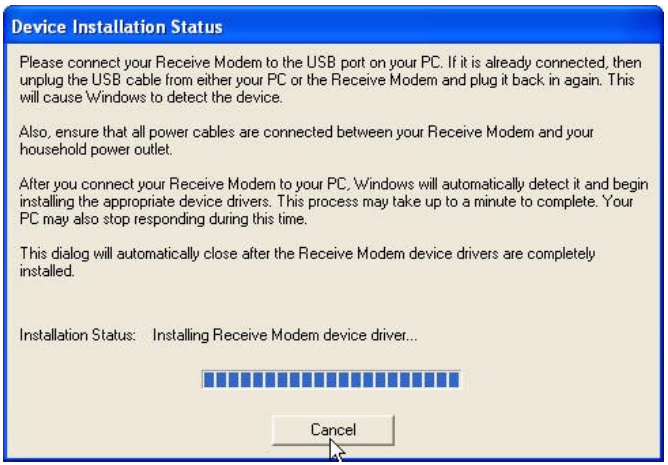

Device Installation Status
Please connect your Receive Modem to the USB port on your PC. If it is already connected, then unplug the USB cable from either your PC or the Receive Modem and plug it back in again. This will cause Windows to detect the device.
Also, ensure that all power cables are connected between your Receive Modem and your household power outlet.
After you connect your Receive Modem to your PC, Windows will automatically detect it and begin installing the appropriate device drivers. This process may take up to a minute to complete. Your PC may also stop responding during this time.
This dialog will automatically close after the Receive Modem device drivers are completely installed.
Installation Status: Installing Receive Modem device driver...
Cancel

Figure 15: Device Installation Status screen

5. Connect the USB cable to an available USB port on your computer.
   Note: After the USB modem driver is installed, your system may appear to freeze for a short time. This is expected and may occur if the driver takes several seconds to initiate. Follow the on-screen instructions.

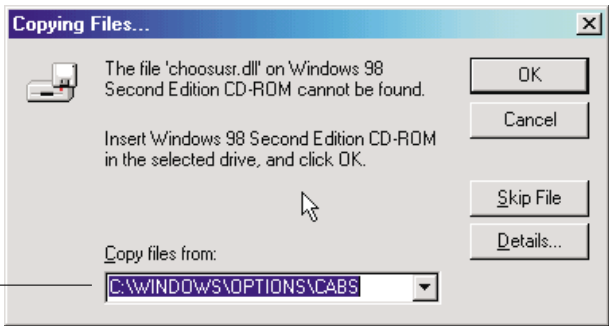
6. During the installation of DIRECWAY, Windows may ask for the location of certain system files. Windows groups system files into sets called **cabinet files**. The cabinet files have the **`.cab`** extension and may have been included by your computer manufacturer in the **`c:\windows\options\cabs`** directory.

   If you do not have `.cab` files on your hard drive you will need to insert the **Windows operating system CD** and identify the path to the `.cab` files as shown in Figure 16.

   If you have a **Windows 98SE CD**, point to the Win98 folder.

   If you have a **Windows ME CD**, point to the Win9x folder.

   For example, if your CDROM drive were labeled D and you were using the Windows 98SE CD, enter **`d:\win98`** when prompted.


Copying Files...
The file 'choosusr.dll' on Windows 98 Second Edition CD-ROM cannot be found.
OK
Cancel
Insert Windows 98 Second Edition CD-ROM in the selected drive, and click OK.
Skip File
Details...
Copy files from:
C:\WINDOWS\OPTIONS\CABS

Enter the path where your Windows `.cab` files reside. Copy files from box. Note that in this example the files reside on the hard disk drive.

Figure 16: Supplying the path to the `.cab` files

7. If Windows found the `.cab` files on your hard drive, the installation continues automatically. If you got the `.cab` files from a Windows CD, reinsert the DIRECWAY CD now. A second installation session may try to start. Exit out of it and return to the installation already in progress.
8. Depending on your configuration, your system may restart after loading the drivers. If you are prompted to restart your computer, click **Finish**. When your system restarts, Microsoft Networking may display a screen asking you to log in. Click **Cancel** or press the keyboard **Esc** key to skip the screen. (See FAQ 11 on page 68 to learn how to turn off this screen.)
9. The software installation program is complete. Click **Finish** to continue to the registration program.

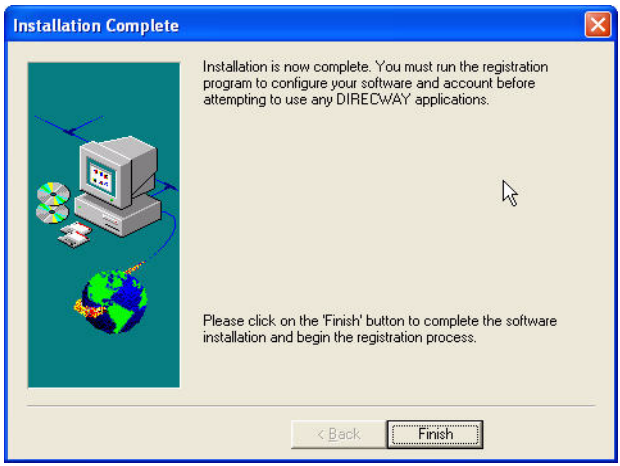

Installation Complete
Installation is now complete. You must run the registration program to configure your software and account before attempting to use any DIRECWAY applications.
Please click on the 'Finish' button to complete the software installation and begin the registration process.
< Back
Finish

Figure 17: Installation completion message

Registering your system for service

After the software installation is complete, you must register your system for service in order to activate your system. The method used to do this is called **WebSetup**.

During the registration process, WebSetup will determine the best method to register. The default is **Satellite Based Commissioning**, but **Dial Up Commissioning** may be selected.

1. WebSetup should automatically appear as shown in Figure 18. If it does not appear automatically, select **Start** →*Programs* →*DIRECWAY* and click **WebSetup**. For Windows XP, select **Start** →*All Programs* →*DIRECWAY* and click **WebSetup.**
2. Click **Next** when the WebSetup screen appears.

WebSetup - Welcome
Welcome to DIRECWAY® Registration
This program will configure your software by contacting the DIRECWAY registration server. Please press the "Next" button when you are ready to begin.
Back
Next
Exit

Figure 18: Starting WebSetup

Note: During the following steps, you must verify that all information is complete and accurate before you click **Submit**. If you fail to complete a required field and click **Submit**, a message prompts you to go back. However, if the page times out, you may get a **Retry** popup window. Click **Retry** to continue. If the program fails to continue, close the screen and restart WebSetup. Go to step on page 25.

3. If you are performing a **system recommission**, enter the zip code of your DIRECWAY location as shown in Figure 19, click **Next**, and go to step 9 on page 28.

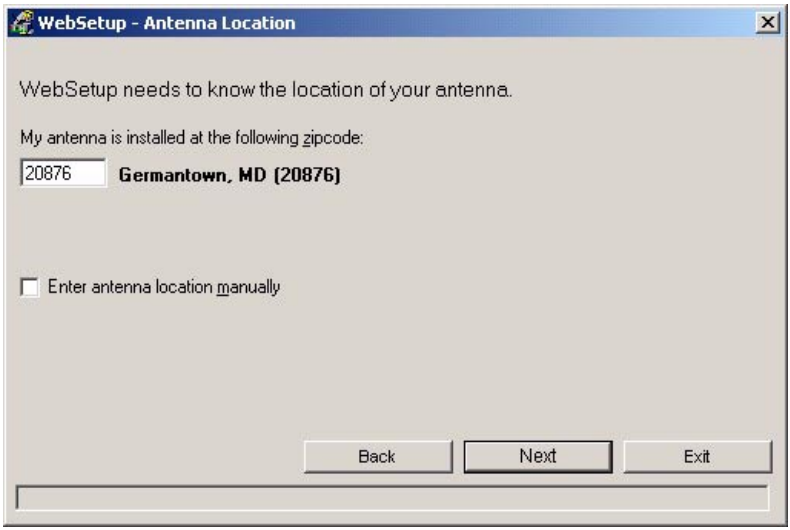


Figure 19: Entering your zip code for a system recommission

Note: To enter the antenna location manually, click the checkbox in the above screen and click **Next**.

4. If you are performing a **system recommission** for a new install, go to *Recommissioning the system for a new install* on page 27. If you are performing a **system recommission** for an upgrade installation, go to *Recommissioning the system for an upgrade* on page 28.

Recommissioning the system for a new install

When the screen shown in Figure 19 is displayed, follow the steps given below.

5. Enter your zip code and click **Next**. The screen shown in Figure 20 appears.

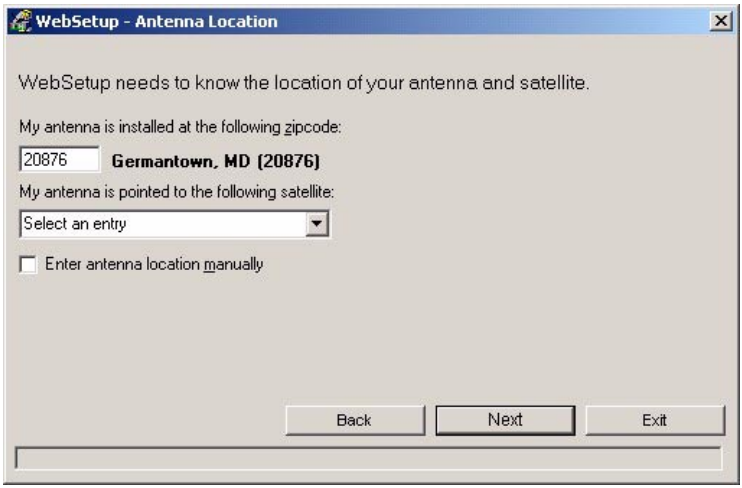

WebSetup - Antenna Location
WebSetup needs to know the location of your antenna and satellite.
My antenna is installed at the following zipcode:
20876
Germantown, MD (20876)
My antenna is pointed to the following satellite:
Select an entry
Enter antenna location manually
Back
Next
Exit

Figure 20: Entering your zip code for a new system commission

6. Select the appropriate satellite from the drop list and click **Next**.

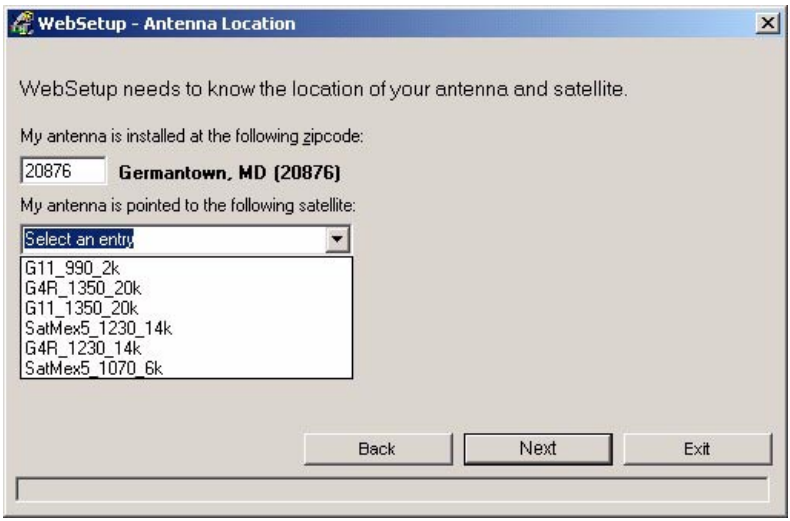


Figure 21: Selecting a satellite for commissioning

7. If WebSetup determines that **Satellite Based Commissioning** can be used, the screen in Figure 22 appears.

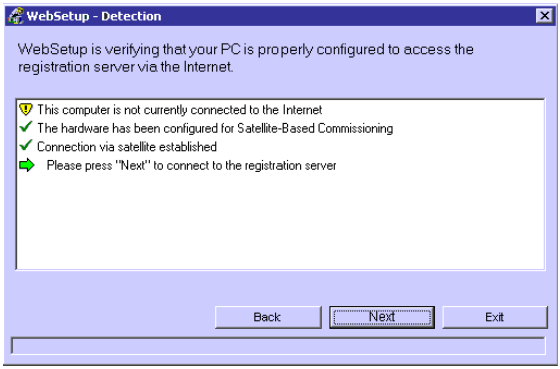

WebSetup - Detection
WebSetup is verifying that your PC is properly configured to access the registration server via the Internet.
This computer is not currently connected to the Internet
The hardware has been configured for Satellite-Based Commissioning
Connection via satellite established
Please press "Next" to connect to the registration server
Back
Next
Exit

Figure 22: WebSetup selects Satellite Based Commissioning for a new install

8. Go to step 10 on page 29.

Recommissioning the system for an upgrade

When the screen shown in Figure 19 is displayed, follow the steps given below.

9. If WebSetup determines that **Satellite Based Commissioning** can be used, you will see the screen in Figure 23 if this is the first time ranging has been done, or Figure 24 if ranging has been done previously. Click **Next** and go to step 13 on page 31.

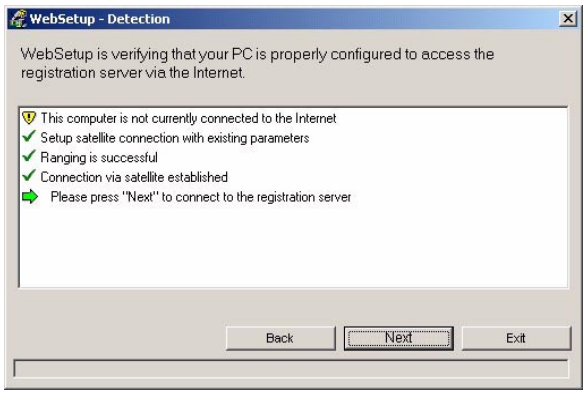

WebSetup - Detection
WebSetup is verifying that your PC is properly configured to access the registration server via the Internet.
This computer is not currently connected to the Internet
Setup satellite connection with existing parameters
Ranging is successful
Connection via satellite established
Please press "Next" to connect to the registration server
Back
Next
Exit

Figure 23: WebSetup selects Satellite Based Commissioning with ranging

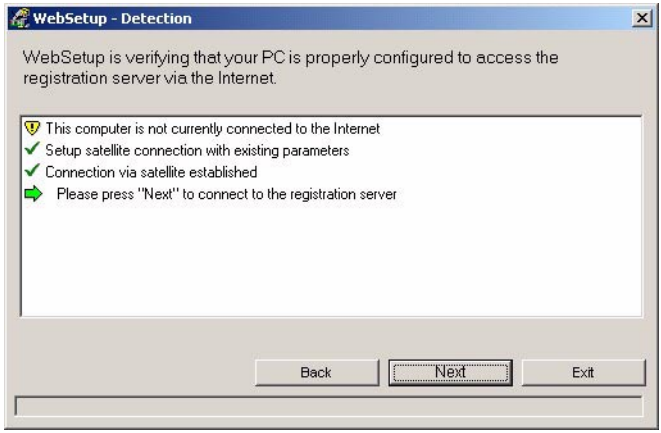

WebSetup - Detection
WebSetup is verifying that your PC is properly configured to access the registration server via the Internet.
This computer is not currently connected to the Internet
Setup satellite connection with existing parameters
Connection via satellite established
Please press "Next" to connect to the registration server
Back
Next
Exit

Figure 24: WebSetup selects Satellite Based Commissioning for an upgrade

10. If WebSetup fails SBC because of no signal (Figure 25) or no server response (Figure 26), do the following:
    a. Click **Back** and retry.
    b. If retry fails, use **dial-up registration**. Click **Next** and go to step 11 on page 30.

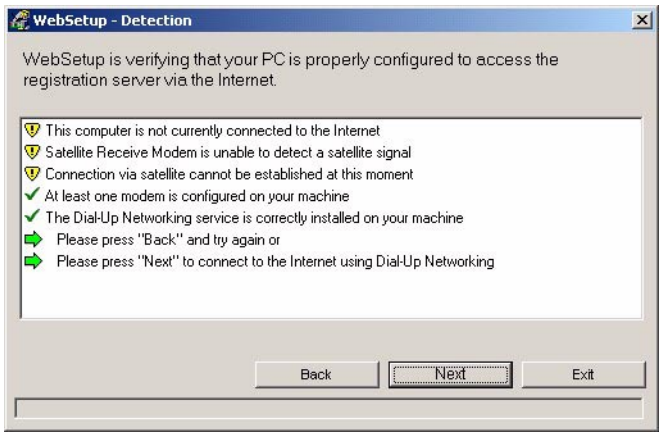

WebSetup - Detection
WebSetup is verifying that your PC is properly configured to access the registration server via the Internet.
This computer is not currently connected to the Internet
Satellite Receive Modem is unable to detect a satellite signal
Connection via satellite cannot be established at this moment
At least one modem is configured on your machine
The Dial-Up Networking service is correctly installed on your machine
Please press "Back" and try again or
Please press "Next" to connect to the Internet using Dial-Up Networking
Back
Next
Exit

Figure 25: SBC fails for lack of receive signal

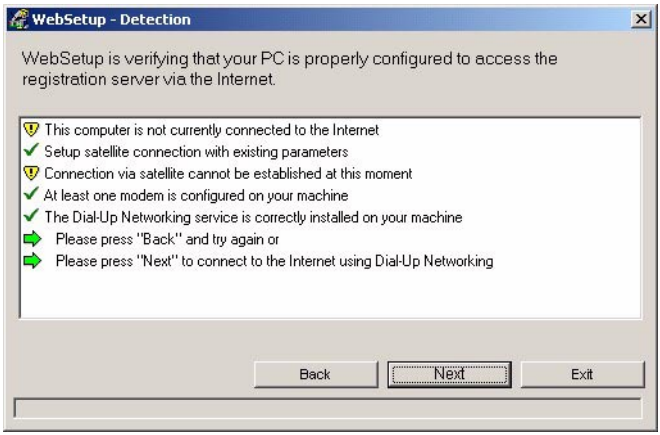

WebSetup - Detection
WebSetup is verifying that your PC is properly configured to access the registration server via the Internet.
This computer is not currently connected to the Internet
Setup satellite connection with existing parameters
Connection via satellite cannot be established at this moment
At least one modem is configured on your machine
The Dial-Up Networking service is correctly installed on your machine
Please press "Back" and try again or
Please press "Next" to connect to the Internet using Dial-Up Networking
Back
Next
Exit

Figure 26: SBC fails for lack of SBC server response

11. If you have more than one modem installed on your computer, WebSetup will prompt you to select one as shown in Figure 27. WebSetup connects to the registration server using either the toll-free number or your ISP connection. HUGHES recommends that you use the toll-free account by checking the **Use built-in toll-free account** and clicking **Next**

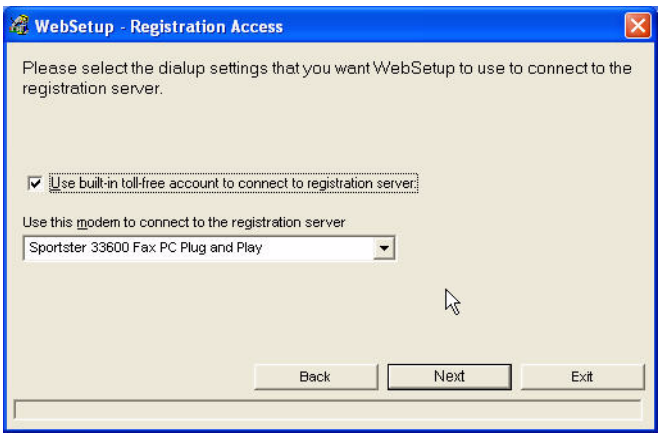

WebSetup - Registration Access
Please select the dialup settings that you want WebSetup to use to connect to the registration server.
Use built-in toll-free account to connect to registration server.
Use this modem to connect to the registration server
Sportster 33600 Fax PC Plug and Play
Back
Next
Exit

Figure 27: Selecting a modem and registration access using the toll-free number

12. WebSetup next connects to the registration server as shown in Figure 28.

Figure 28: WebSetup connection progress

13. Regardless of the registration method (Satellite or Dial-Up) WebSetup now connects to the registration server and loads the registration software. Click **Next**.

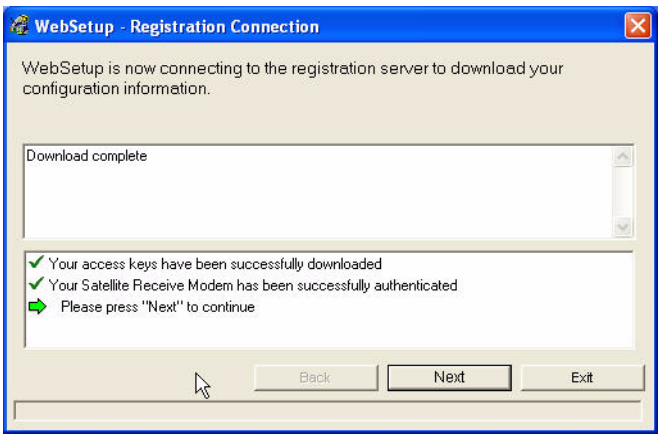

WebSetup - Registration Connection
WebSetup is now connecting to the registration server to download your configuration information.
Download complete
Your access keys have been successfully downloaded
Your Satellite Receive Modem has been successfully authenticated
Please press "Next" to continue
Back
Next
Exit

Figure 29: WebSetup connected to the registration server.

14. You are prompted to scroll down and agree to the terms of service. Click **I Agree**.

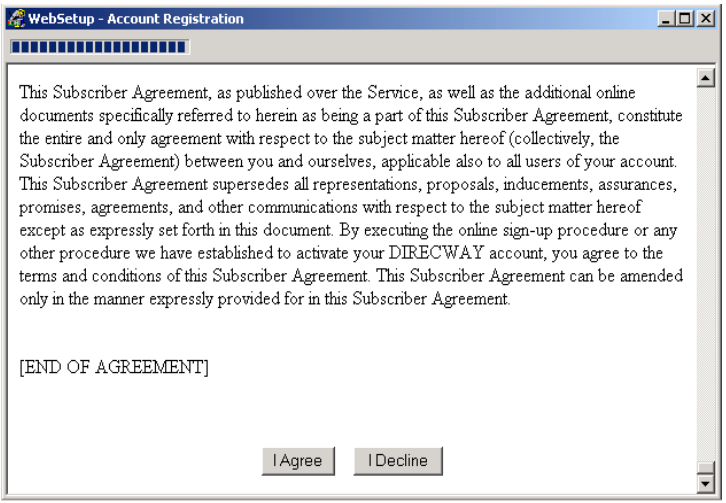

WebSetup - Account Registration
This Subscriber Agreement, as published over the Service, as well as the additional online documents specifically referred to herein as being a part of this Subscriber Agreement, constitute the entire and only agreement with respect to the subject matter hereof (collectively, the Subscriber Agreement) between you and ourselves, applicable also to all users of your account. This Subscriber Agreement supersedes all representations, proposals, inducements, assurances, promises, agreements, and other communications with respect to the subject matter hereof except as expressly set forth in this document. By executing the online sign-up procedure or any other procedure we have established to activate your DIRECWAY account, you agree to the terms and conditions of this Subscriber Agreement. This Subscriber Agreement can be amended only in the manner expressly provided for in this Subscriber Agreement.
[END OF AGREEMENT]
I Agree
I Decline

Figure 30: Agreeing to terms of your DIRECWAY account

15. Enter the **Site Account Number (SAN)** and click **Continue**. Remember that the SAN is case sensitive.

WebSetup - Account Registration
Registration
This is the the site account number feature.
VeriSign Secure Site Click to verify
Site Account Information
Site Account Number (SAN):
PIN:
Continue
Your information is protected using industry standard SSL technology.

Figure 31: Entering the Site Account Number (SAN)

16. The Welcome screen is displayed. Click **Continue**.

Figure 32: The Welcome page is displayed

17. Create an e-mail account by completing the fields and clicking **Create Account**. Be sure to enter your password twice. Before you click **Continue**, click **Print this page** to produce a record of your account.

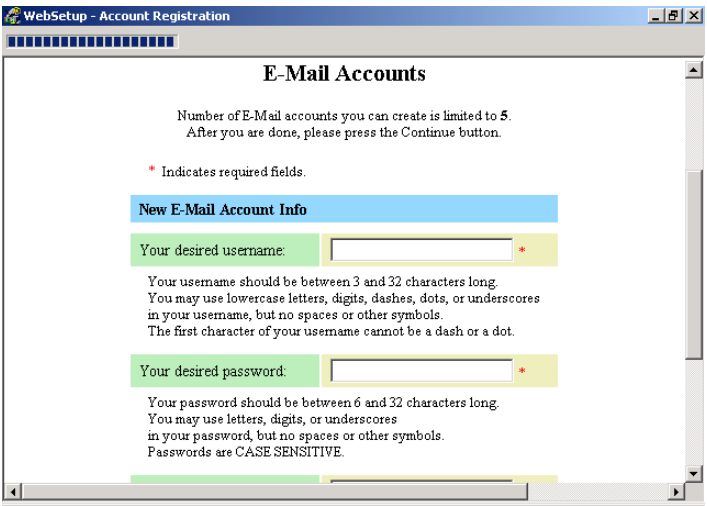

WebSetup - Account Registration
E-Mail Accounts
Number of E-Mail accounts you can create is limited to 5.
After you are done, please press the Continue button.
* Indicates required fields.
New E-Mail Account Info
Your desired username:
Your username should be between 3 and 32 characters long.
You may use lowercase letters, digits, dashes, dots, or underscores
in your username, but no spaces or other symbols.
The first character of your username cannot be a dash or a dot.
Your desired password:
Your password should be between 6 and 32 characters long.
You may use letters, digits, or underscores
in your password, but no spaces or other symbols.
Passwords are CASE SENSITIVE.

Figure 33: Registering e-mail accounts

18. Create additional e-mail accounts by completing the fields and clicking **Create Account**. Be sure to enter your password twice. Before you click **Continue**, click **Print this page** to produce a record of your account.

    Notes: You can return to this screen at a later date to create additional accounts by running WebSetup. You do not need to create all e-mail accounts at the same time.

    Depending on the service offering you have selected, the maximum number of e-mail accounts you can create is five.

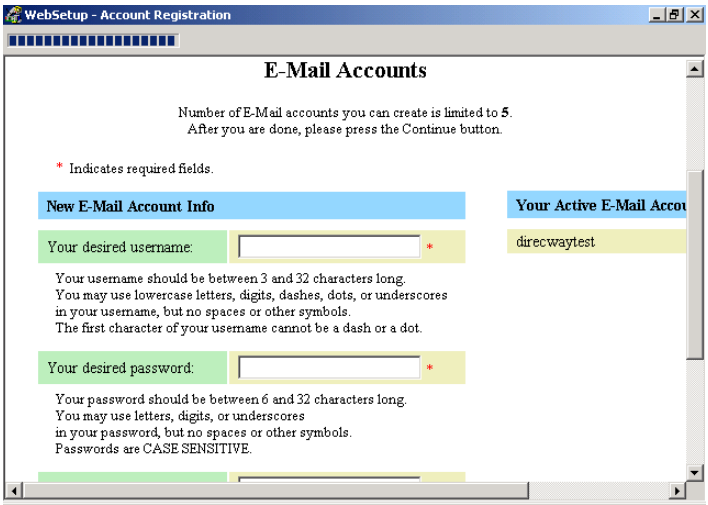

WebSetup - Account Registration
E-Mail Accounts
Number of E-Mail accounts you can create is limited to 5.
After you are done, please press the Continue button.
* Indicates required fields.
New E-Mail Account Info
Your Active E-Mail Accou
Your desired username:
direcwaytest
Your username should be between 3 and 32 characters long.
You may use lowercase letters, digits, dashes, dots, or underscores
in your username, but no spaces or other symbols.
The first character of your username cannot be a dash or a dot.
Your desired password:
Your password should be between 6 and 32 characters long.
You may use letters, digits, or underscores
in your password, but no spaces or other symbols.
Passwords are CASE SENSITIVE.

Figure 34: Adding additional e-mail accounts

19. If WebSetup specified a **dial-up account** in step 10 on page 29, create an ISP account by completing the fields and clicking **Create Account**. Be sure to enter your password twice. Before you click **Continue**, click **Print this page** to produce a record of your account. See Figure 35.

    If WebSetup did **not** specify a dial-up account in step 10 on page 29, you will not see this screen and you should go to step 13 on page 31.

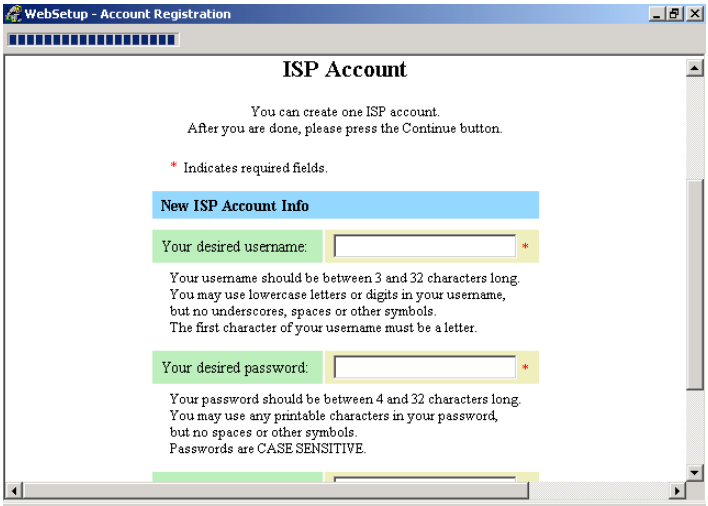

WebSetup - Account Registration
ISP Account
You can create one ISP account.
After you are done, please press the Continue button.
* Indicates required fields.
New ISP Account Info
Your desired username:
Your username should be between 3 and 32 characters long.
You may use lowercase letters or digits in your username,
but no underscores, spaces or other symbols.
The first character of your username must be a letter.
Your desired password:
Your password should be between 4 and 32 characters long.
You may use any printable characters in your password,
but no spaces or other symbols.
Passwords are CASE SENSITIVE.

Figure 35: Creating an ISP account

20. WebSetup will display your ISP ID number. Before you click **Continue**, click **Print this page** to produce a record of your account. You will not get this screen if you did not select to create an ISP account.

Figure 36: WebSetup displays the ISP number

21. Figure 37 is displayed when registration is complete. Click **Continue**.

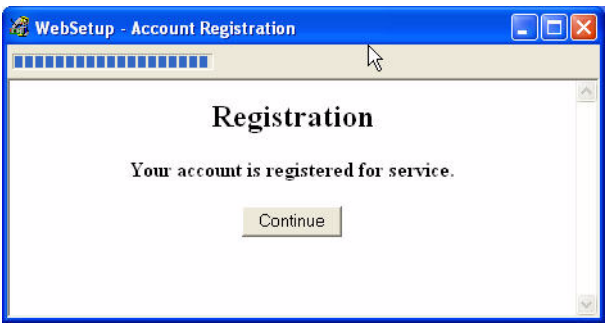


Figure 37: Registration is complete

22. WebSetup configures your network settings and software configuration as shown in Figure 38. Click **Next**.

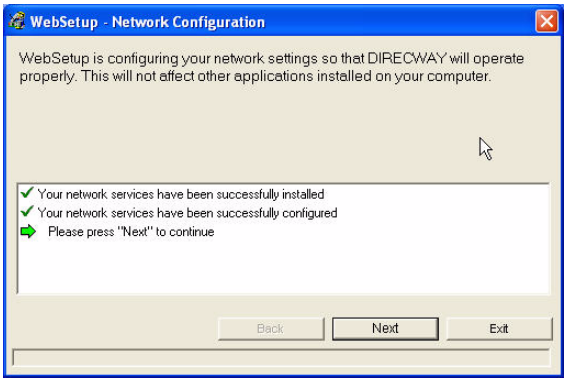

WebSetup - Network Configuration
WebSetup is configuring your network settings so that DIRECWAY will operate properly. This will not affect other applications installed on your computer.
Your network services have been successfully installed
Your network services have been successfully configured
Please press "Next" to continue
Back
Next
Exit

Figure 38: WebSetup configuring network settings

23. WebSetup indicates that it is completing the configuration. Click **Restart**.

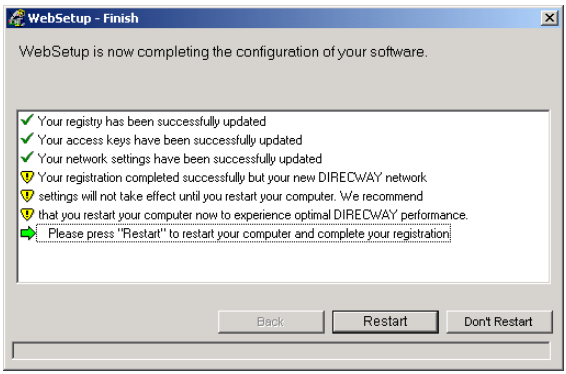

WebSetup - Finish
WebSetup is now completing the configuration of your software.
Your registry has been successfully updated
Your access keys have been successfully updated
Your network settings have been successfully updated
Your registration completed successfully but your new DIRECWAY network
settings will not take effect until you restart your computer. We recommend
that you restart your computer now to experience optimal DIRECWAY performance.
Please press "Restart" to restart your computer and complete your registration
Back
Restart
Don't Restart

Figure 39: WebSetup completing the configuration

24. After restart, WebSetup completes the configuration and displays the **Getting Started** embedded help tool. This tool is always available to you through an icon on your desktop. Access Getting Started now or close the window.

Figure 40: The DIRECWAY Getting Started embedded help tool

Surfing

After you complete WebSetup, the **DW** icon appears in the system tray (Figure 41). You cannot access the Internet without the DW icon appearing.

It could take up to 30 seconds for the DW icon to appear, during which it may seem that nothing is happening. Do not take any action. If the icon does not appear after 30 seconds, restart your computer. Upon restart, the **DW** icon should appear in the system tray. If the icon still does not appear in system tray, load it manually by selecting **Start**→ *Programs* →*DIRECWAY* and clicking on

Navigator. For Windows XP, select **Start**→*All Programs*→*DIRECWAY.*

Note: The **DW** icon may have a different appearance depending on your system supplier.

Figure 41: The DW icon (circled)

You are now ready to surf the Web. Launch a browser and verify that you can browse in two-way mode; that is, both send and receive data via satellite.

Notes: The first time you launch a browser, you may receive a **Page cannot be displayed** message. This is due to a mismatch in timing synchronization between your system and the satellite signal. If this happens, simply refresh the browser or close and relaunch it. The message may also appear if the computer has been idle for a long period.

Some computers may have a modem detection problem and be unable to surf. See page 76 for instructions on how to correct this problem.

Verifying connection through the satellite

If you experience problems with starting DIRECWAY, right click the DW icon in the system tray and select Status. The Status screen will be displayed with information on the connection and strength figure.

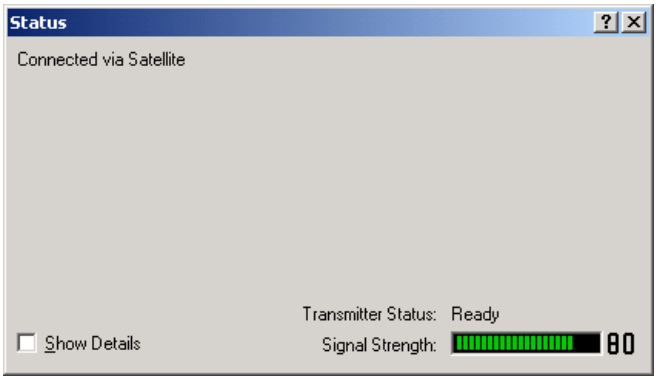


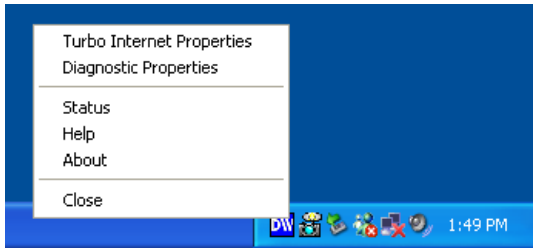
Figure 42: DIRECWAY status screen

DIRECWAY help tools

DIRECWAY provides four help tools. See page 57 for a complete description. These tools are:

- **User guides** in PDF format on the installation CD-ROM - use Explorer to access the User Guides folder.
- An embedded **Getting Started** tool in MS help format - double-click the **DW icon** on your desktop to access this tool.

- An embedded **Help Files** tool in HTML help format - right click the **DW icon** in your system tray to access this tool.



- Online help from **myDIRECWAY.com** - use your browser to reach **www.myDIRECWAY.com.**

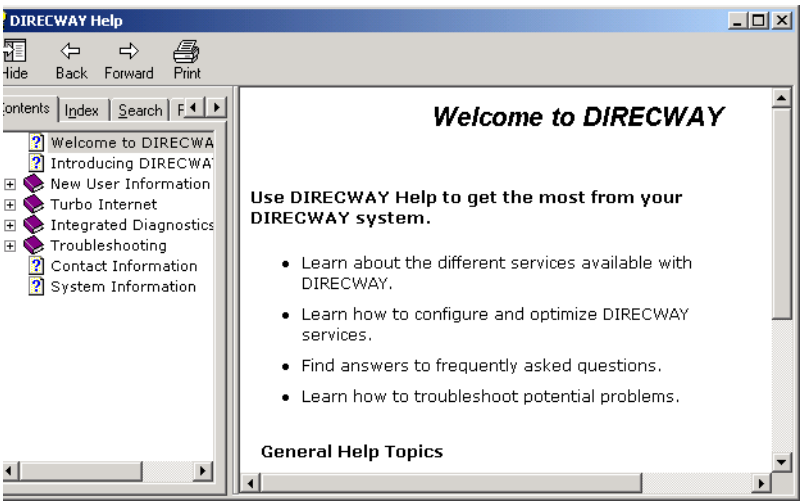


Figure 43: Help Pages main page

These Help tools are best used in the following manner:

- Access and print all relevant user guides for installation and operational information.
- Use Getting Started for an initial tour of your DIRECWAY system.

- Use Help Files for optimizing and troubleshooting your system, identifying system information, and obtaining contact information.
- Use myDIRECWAY for the latest online information about your system.

The Antenna Pointing - Transmitter screens

The Antenna Pointing - Transmitter screens are used by your installer when fine tuning the antenna for radio transmission. **Do not use these screens** unless requested by your installer or by DIRECWAY Customer Service.

> **⚠ CAUTION**
>
> **Running these tests could disable your system and may require a service call from your service provider.**

The Antenna Pointing screens, as shown in Figure 44, are accessible if your setup accesses the Automatic Cross Polarization (ACP) server. For details, see *What is Automatic Cross Polarization (ACP)?* on page 71.

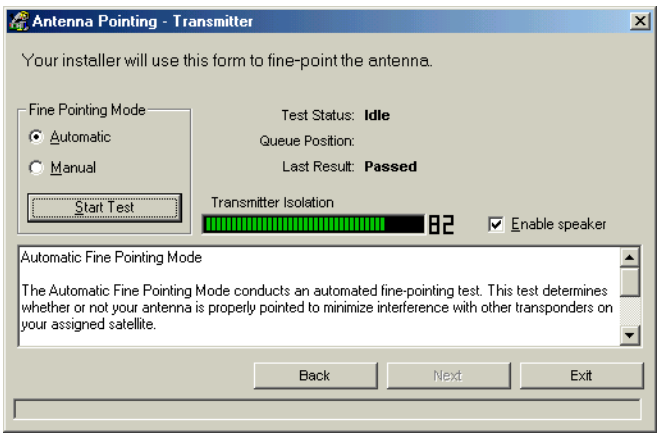

Antenna Pointing - Transmitter
Your installer will use this form to fine-point the antenna.
Fine Pointing Mode
Automatic
Manual
Start Test
Test Status: Idle
Queue Position:
Last Result: Passed
Transmitter Isolation
82
Enable speaker
Automatic Fine Pointing Mode
The Automatic Fine Pointing Mode conducts an automated fine-pointing test. This test determines whether or not your antenna is properly pointed to minimize interference with other transponders on your assigned satellite.
Back
Next
Exit

Figure 44: Antenna Pointing - Transmitter screen

Troubleshooting the modem lights

During normal operation, both receive modem and transmit modem READY lights are continuously lit, and the RX and TX lights flash as data is received and transmitted via the satellite. The RX and TX lights are not lit and do not flash when there is no data transfer. See Figure 45 and Figure 46.

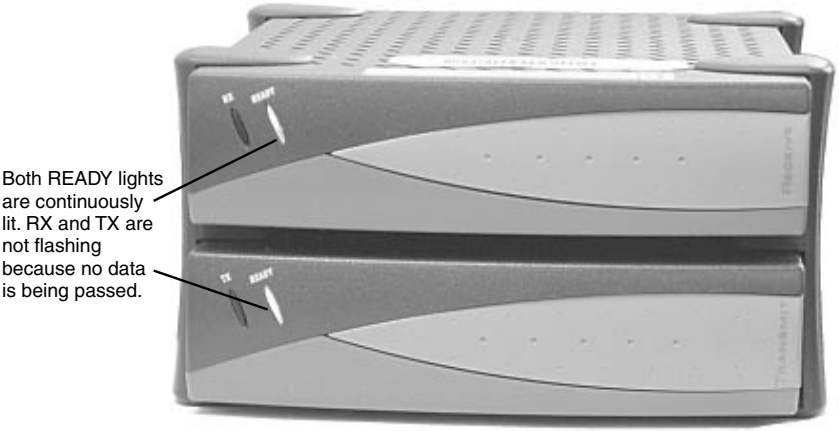


Figure 45: Normal operation, no data being sent or received

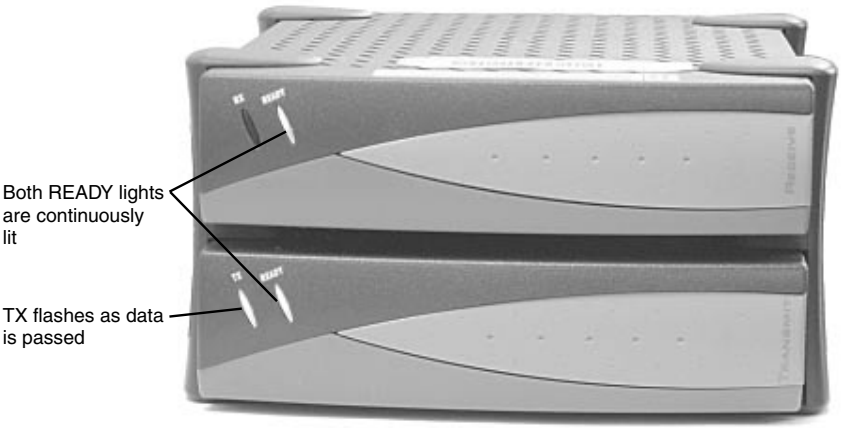


Figure 46: Normal operation, data being sent and received

If the receive modem READY light is lit continuously but your transmit modem lights are off, the transmitter is not responding. Verify that your cable connections are correct. Unplug the DIRECWAY modem power cord, plug it back in, and restart your computer.

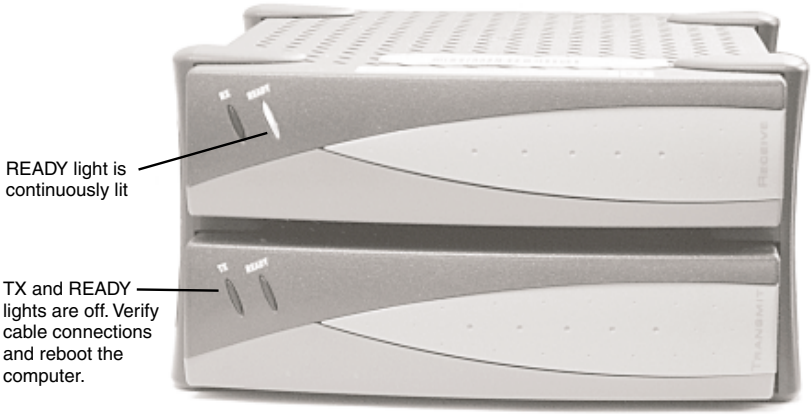


Figure 47: Transmit modem not transmitting

If both of the receive modem lights are out, the receive modem is offline. Unplug the DIRECWAY modem power cord, plug it back in, and restart the computer.

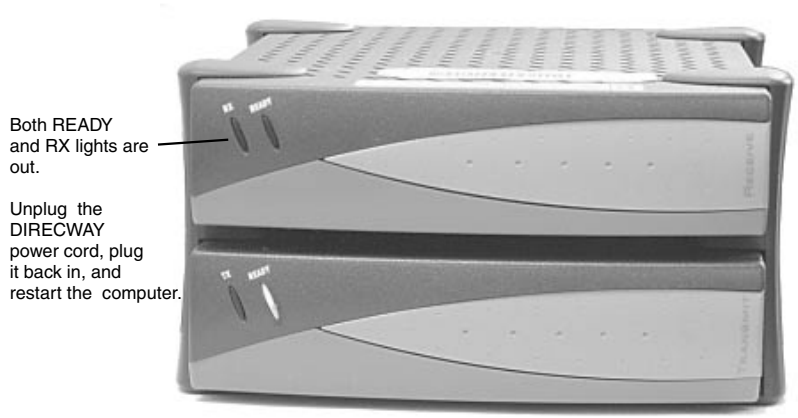


Figure 48: Receive modem lights not on

Configuring Microsoft Internet Explorer and Outlook Express

This section describes how to run the **Internet Connection Wizard**. The wizard installs both Internet Explorer and Outlook Express.

Notes: The screens you see may vary depending on the version of Internet Explorer you are using.

The instructions in this section help you to configure one e-mail address. To configure additional e-mail accounts, repeat the instructions completely starting with Step 1 below. Repeat for as many e-mail accounts as you wish to configure.

You may see additional screens than those presented here if you have an e-mail account set up on this computer.

1. Launch the Internet Connection Wizard by opening the run dialog box, selecting **Start**->*Run*, and typing **inetwiz** in the space provided. Click **OK**.

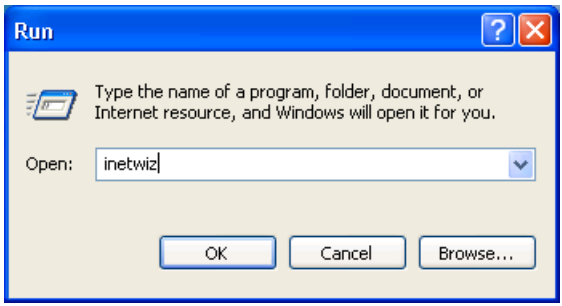


Figure 49: Executing the inetwiz command

2. Select **Connect using my local area network (LAN)** and click **Next**.

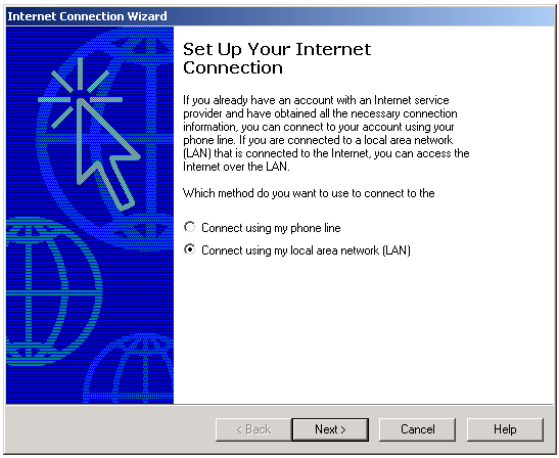

Internet Connection Wizard
Set Up Your Internet Connection
If you already have an account with an Internet service provider and have obtained all the necessary connection information, you can connect to your account using your phone line. If you are connected to a local area network (LAN) that is connected to the Internet, you can access the Internet over the LAN.
Which method do you want to use to connect to the
Connect using my phone line
Connect using my local area network (LAN)
< Back
Next >
Cancel
Help

Figure 50: Selecting Connect Using My LAN for IE

3. Place a check in the checkbox labeled **Manual Proxy Server**. Ensure that the checkboxes for **Automatic discovery of proxy server (recommended)** and **Use automatic configuration script** are unchecked.
4. Click **Next**.

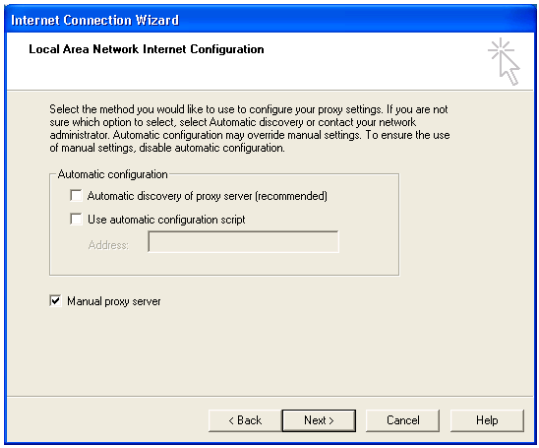

Internet Connection Wizard
Local Area Network Internet Configuration
Select the method you would like to use to configure your proxy settings. If you are not sure which option to select, select Automatic discovery or contact your network administrator. Automatic configuration may override manual settings. To ensure the use of manual settings, disable automatic configuration.
Automatic configuration
Automatic discovery of proxy server (recommended)
Use automatic configuration script
Address:
Manual proxy server
< Back
Next >
Cancel
Help

Figure 51: Selecting the LAN configuration for IE

5. In the **HTTP row** enter 127.0.0.1 in the **Proxy to use field** and 83 in the **Port** field.
6. Ensure that **Use the same proxy for all protocols** is unchecked.
7. Click **Next**.

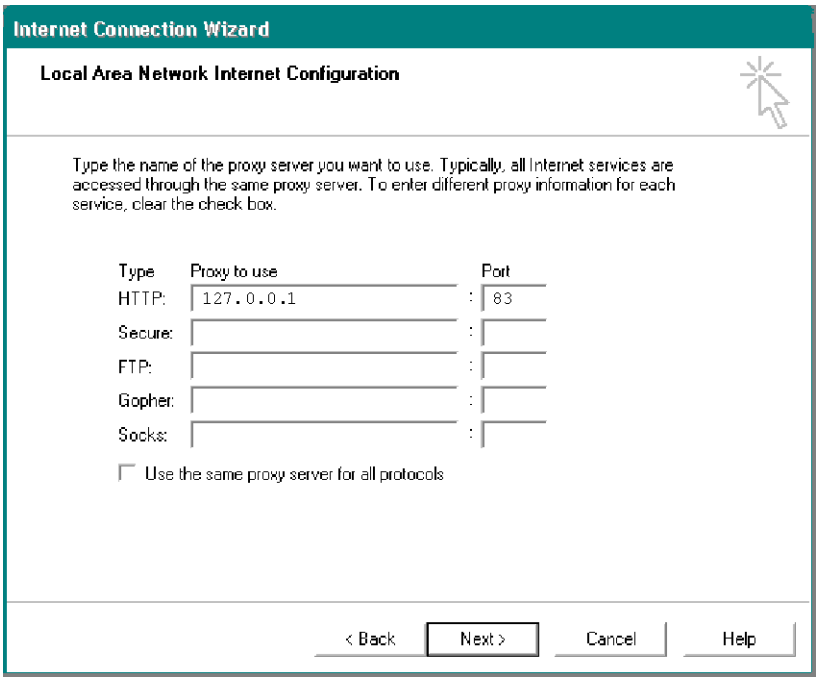

Internet Connection Wizard
Local Area Network Internet Configuration
Type the name of the proxy server you want to use. Typically, all Internet services are accessed through the same proxy server. To enter different proxy information for each service, clear the check box.
Type
Proxy to use
Port
HTTP:
127.0.0.1
83
Secure:
FTP:
Gopher:
Socks:
Use the same proxy server for all protocols
< Back
Next >
Cancel
Help

Figure 52: Entering the proxy server IP address for IE

8. If there are IP addresses for which you do not want to use a proxy, enter them in the window provided.
9. Click **Next**.

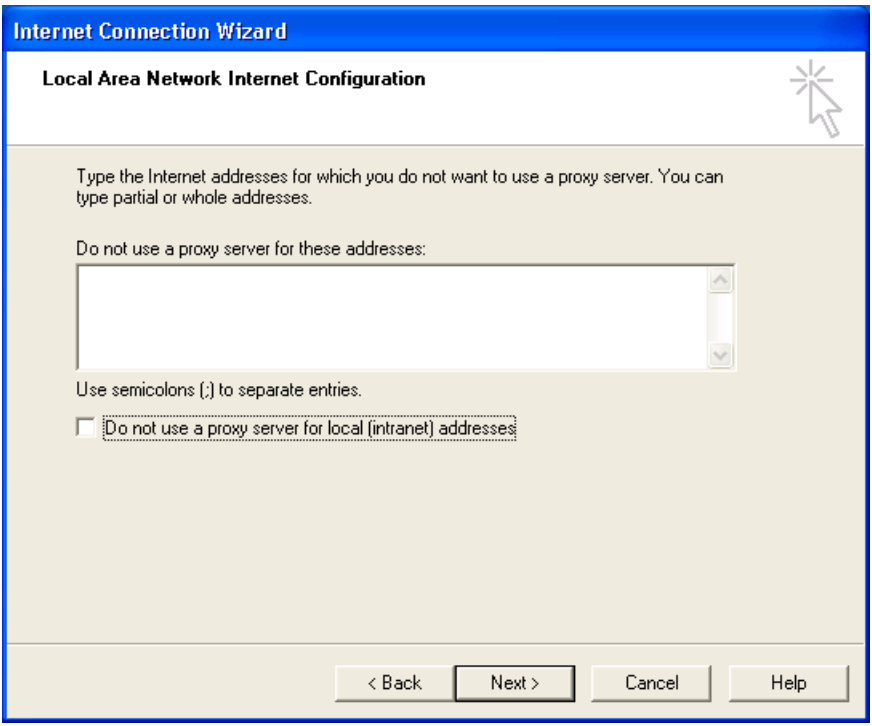

Internet Connection Wizard
Local Area Network Internet Configuration
Type the Internet addresses for which you do not want to use a proxy server. You can type partial or whole addresses.
Do not use a proxy server for these addresses:
Use semicolons (;) to separate entries.
Do not use a proxy server for local (intranet) addresses
< Back
Next >
Cancel
Help

Figure 53: Entering restricted addresses for IE

10. Select **Yes** to set up an Internet mail account and click **Next**.

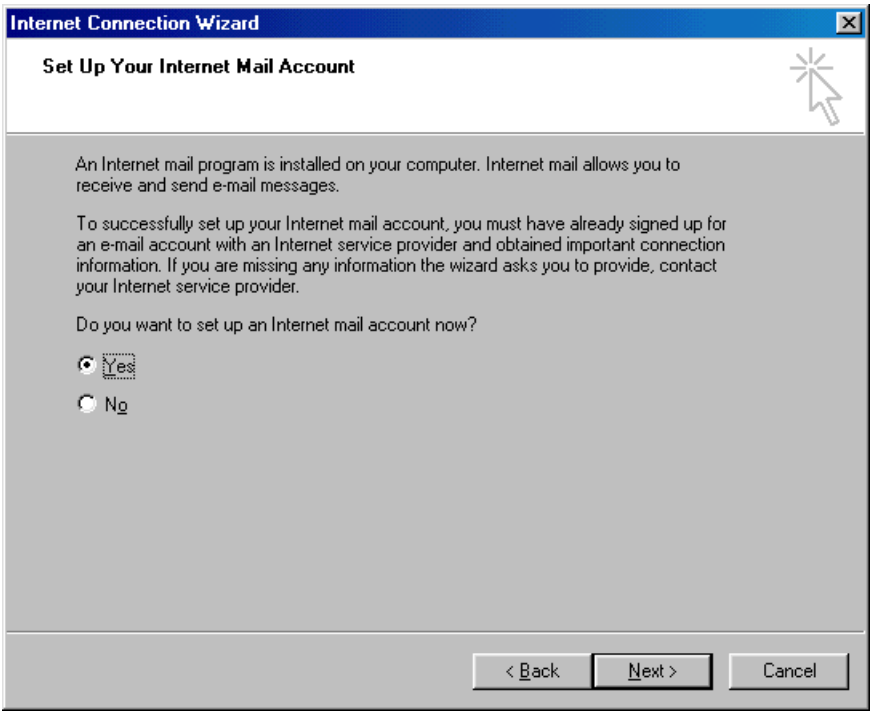

Internet Connection Wizard
Set Up Your Internet Mail Account
An Internet mail program is installed on your computer. Internet mail allows you to receive and send e-mail messages.
To successfully set up your Internet mail account, you must have already signed up for an e-mail account with an Internet service provider and obtained important connection information. If you are missing any information the wizard asks you to provide, contact your Internet service provider.
Do you want to set up an Internet mail account now?
Yes
No
< Back
Next >
Cancel

Figure 54: Selecting Yes to set up an Internet mail account

11. Type your **name** in the space provided and click **Next**.

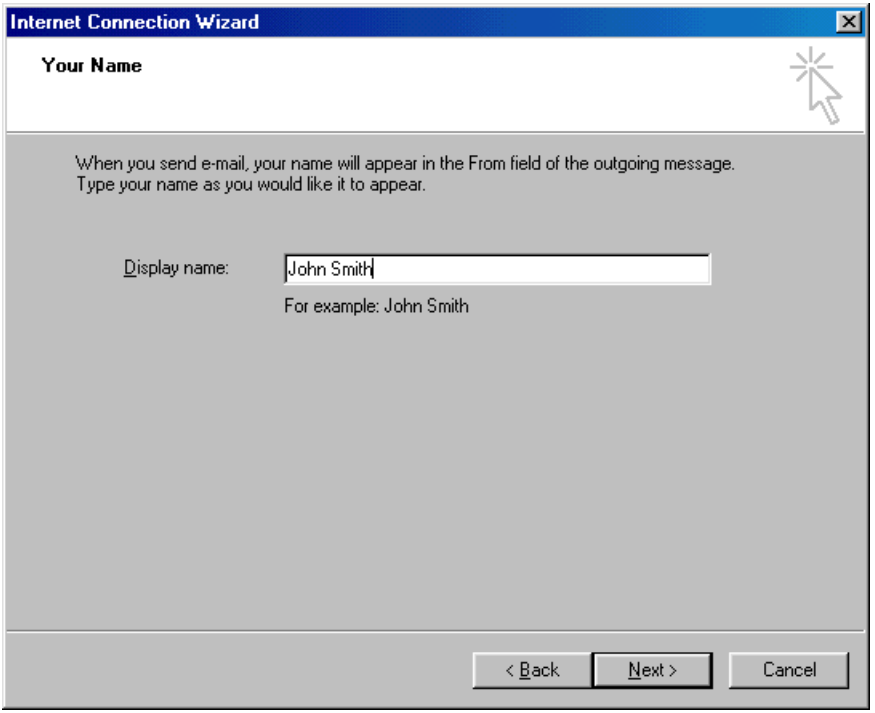

Internet Connection Wizard
Your Name
When you send e-mail, your name will appear in the From field of the outgoing message.
Type your name as you would like it to appear.
Display name:
John Smith
For example: John Smith
< Back
Next >
Cancel

Figure 55: Entering your e-mail name for IE

12. Enter your e-mail address in the space provided and click **Next**.

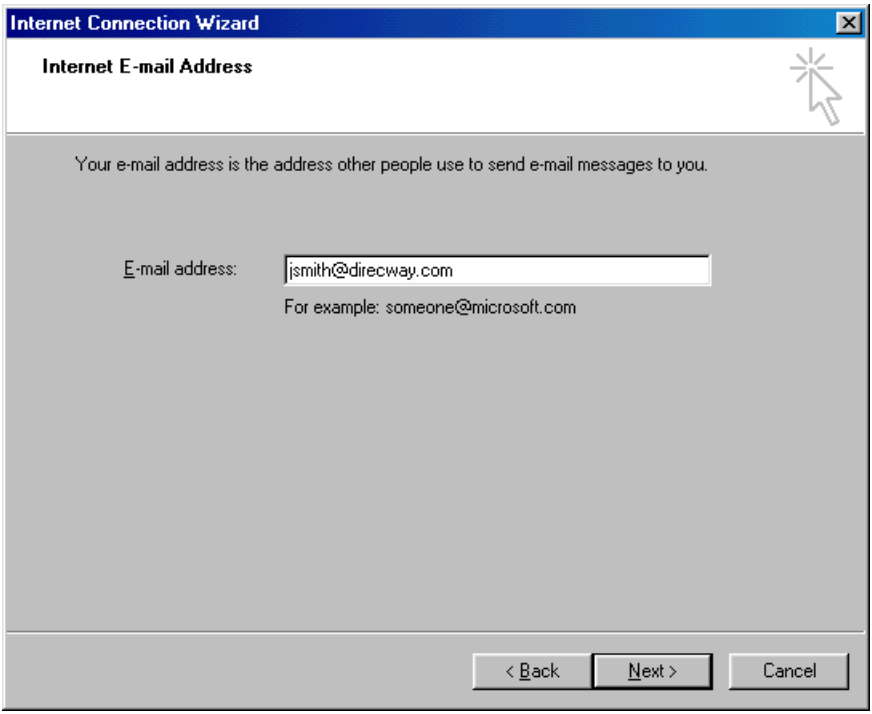

Internet Connection Wizard
Internet E-mail Address
Your e-mail address is the address other people use to send e-mail messages to you.
E-mail address:
jsmith@direcway.com
For example: someone@microsoft.com
< Back
Next >
Cancel

Figure 56: Entering your e-mail address for IE

Note: If you would like to see what e-mail addresses are associated with your DIRECWAY account rerun WebSetup by selecting:
Start→*Programs*→*DIRECWAY*→*WebSetup*

13. Enter the mail server names in the space provided. The incoming DIRECWAY mail server name is **pop3.direcway.com**. The outgoing DIRECWAY mail server name is **smtp.direcway.com**. Click **Next**.

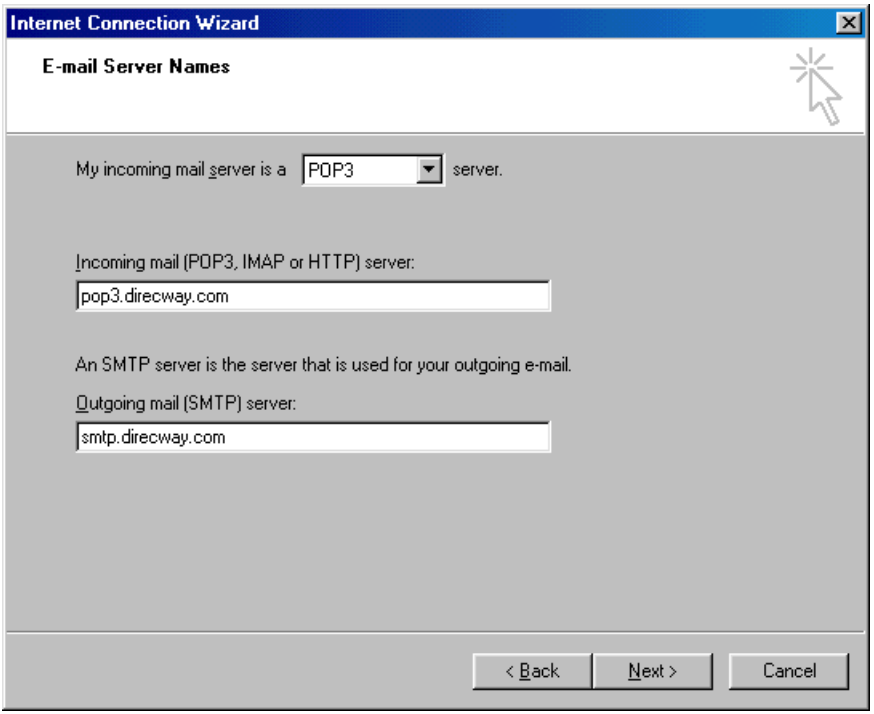


Figure 57: Entering e-mail server names for IE

14. Enter your username and password in the fields provided and click **Next**. Ensure that the checkbox for **Log on using Secure Password Authentication (SPA)** is unchecked.

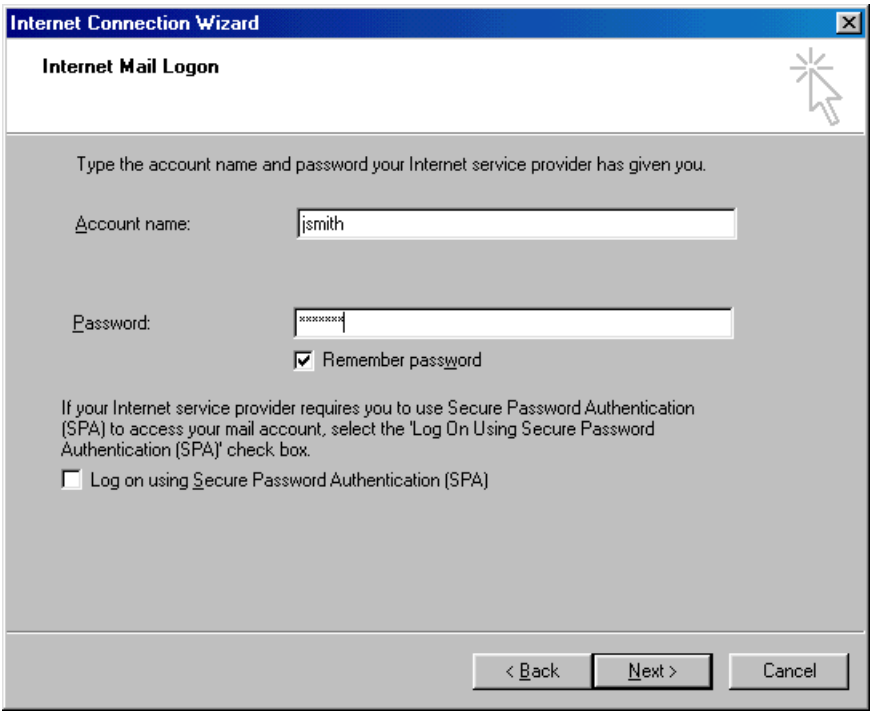

Internet Connection Wizard
Internet Mail Logon
Type the account name and password your Internet service provider has given you.
Account name:
jsmith
Password:
Remember password
If your Internet service provider requires you to use Secure Password Authentication (SPA) to access your mail account, select the 'Log On Using Secure Password Authentication (SPA)' check box.
Log on using Secure Password Authentication (SPA)
< Back
Next >
Cancel

Figure 58: Entering e-mail name and password for Internet mail account

15. Click **Finish** to complete the configuration.

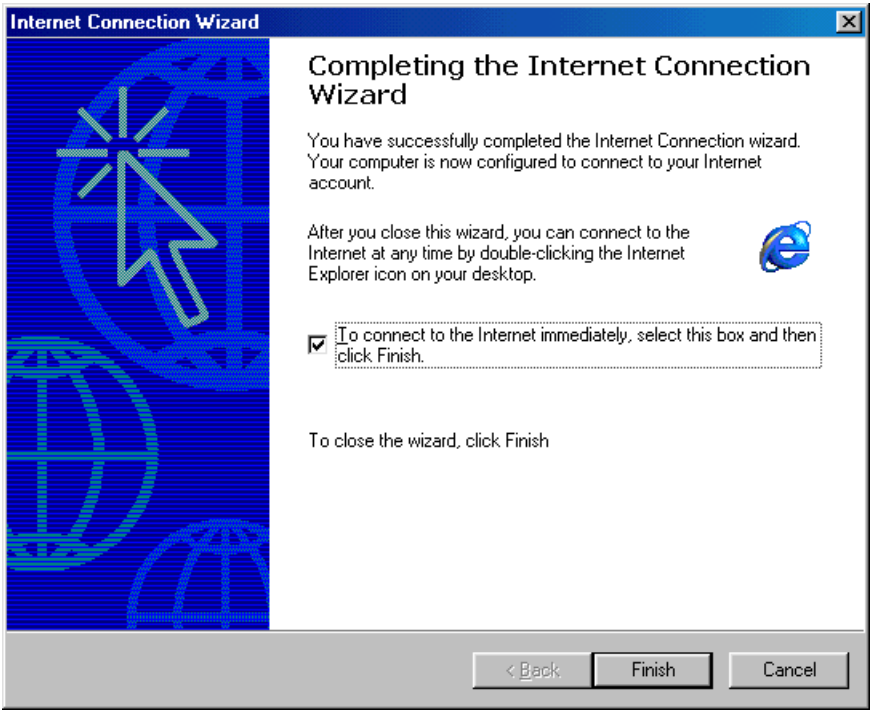

Internet Connection Wizard
Completing the Internet Connection Wizard
You have successfully completed the Internet Connection wizard. Your computer is now configured to connect to your Internet account.
After you close this wizard, you can connect to the Internet at any time by double-clicking the Internet Explorer icon on your desktop.
To connect to the Internet immediately, select this box and then click Finish.
To close the wizard, click Finish
< Back
Finish
Cancel

Figure 59: Completing the Internet Connection Wizard

16. You have completed the configuration of Internet Explorer and Outlook Express.

Launch the Internet Explorer if it did not do so automatically and confirm that you can browse. Launch Outlook Express and confirm that you can send and receive e-mail. See the DIRECWAY help files and the DIRECWAY Web site described on page 57 for further assistance.

⚠ CAUTION

- **When power needs to be removed from the receive modem, ALWAYS unplug the ac power cord from either the wall outlet, surge protector, or power strip.**
- **NEVER pull the power cord from the back of the receive modem. Doing so could damage the pins and also cause a short in the system.**
- **The power supply with the part number 1029075-0001 is to be used only in the United States and Canada.**
- **This unit must be used with 110-volt ac input.**
- **Other countries may have different standards and requirements.**

FAQs 5

This frequently asked questions (FAQ) chapter answers most questions you might have about your new system starting on page 65.

If you cannot find an answer in the FAQs, use the other resources listed below.

Other help resources

All versions of this product offer several general help tools:

- Access the **user guides** in PDF format on the Installation CD-ROM.
- Access the **Getting Started** help tool by double-clicking the **DW** icon on your desktop.
- Access the **Help files** by right-clicking the **DW** icon in your system tray and selecting **Help** from the pop-up list.

If you purchased this product through one of our retail channels:

- Check our Web site **www.mydirecway.com** for more information.
- Send e-mail to technical support by selecting **Email** under **Help Center** on our **www.mydirecway.com** Web site.
- Call 1-866-DIRECWAY (1-866-347-3292).

If you purchased this product from one of our Value Added Resellers (VARs), please do not contact DIRECWAY. Contact your VAR according to the procedure supplied by them for technical support. They are trained to help you with any technical problem.

Accessing the user guides

The complete set of user guides are contained on the DIRECWAY installation CD-ROM. The **ReadMeFirst guide** contains the latest updates to the DIRECWAY installation documentation and some useful getting started tips.

Other **User Guides** cover hardware and software installation for DIRECWAY Two-Way (DW4000) and One-Way (DW3000) indoor systems and antennas, as well as a manual on how to configure Microsoft's Internet Connection Sharing software to work with a DIRECWAY system.

All of these guides are in Adobe Acrobat PDF format.

To access these guides, use Explorer to open the CD-ROM, open the User Guides folder, and double click the **User_Guides.htm** file. A listing of all guides will be displayed as shown in Figure 60. Click on each link to access the guides.

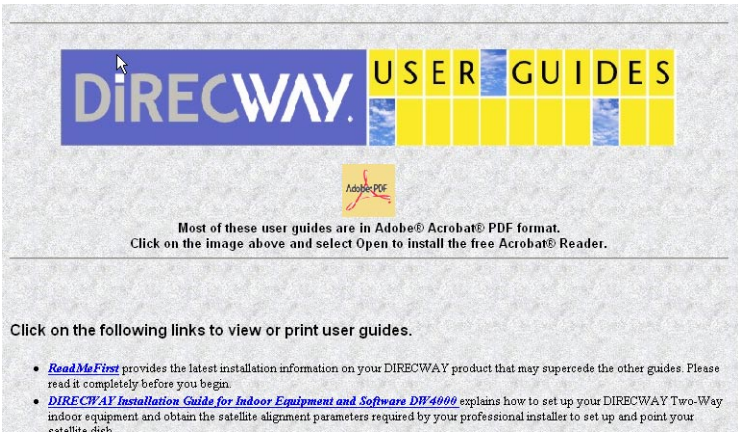

DIRECWAY
USER GUIDES
Most of these user guides are in Adobe® Acrobat® PDF format.
Click on the image above and select Open to install the free Acrobat® Reader.
Click on the following links to view or print user guides.
ReadMeFirst provides the latest installation information on your DIRECWAY product that may supercede the other guides. Please read it completely before you begin.
DIRECWAY Installation Guide for Indoor Equipment and Software DW4000 explains how to set up your DIRECWAY Two-Way indoor equipment and obtain the satellite alignment parameters required by your professional installer to set up and point your

Figure 60: Partial list of user guides on the installation CD-ROM

Getting Started help tool

The embedded Getting Started help tool is primarily designed for first time users. It provides information on support, email, basic operation, and myDIRECWAY.com.

To access this tool, double-click the **DW icon** on your desktop.

Figure 61: The embedded Getting Started help tool

The DIRECWAY Navigator icon

Before you can connect to the Internet, the DIRECWAY Navigator application must be running. It is configured to launch automatically during the Windows startup process and loads an icon into the Windows system tray as shown in Figure 62.

Figure 62: The DW icon in the system tray

If you do not see this icon in the system tray, click **Start**→*Programs*→*DIRECWAY* and select *Navigator* to launch the **DW** icon.

The DIRECWAY Navigator can also be used to configure your DIRECWAY service, determine your signal strength and the connection method, view useful system information, and access DIRECWAY Help (see page 61 for information on DIRECWAY Help). To access the Navigator's menu, right-click the Navigator icon as shown in Figure 63.

Figure 63: The Navigation icon menu

The Navigator application lets you quickly access information about your DIRECWAY system. Your DIRECWAY Site ID, serial number, email information, and satellite parameters will be useful when using the resources available at myDIRECWAY.com or when you need support for your DIRECWAY system. You can use the Navigator icon in the system tray to quickly access information about your DIRECWAY system. To access the DIRECWAY System Information, right-click the Navigator icon, click About, and then click System Information.

DIRECWAY Help

DIRECWAY Help is a collection of useful information that is included with your DIRECWAY software. It provides introductory materials on DIRECWAY software components such as the DIRECWAY Navigator, FAQs, Configuration Information, and basic Troubleshooting steps for your DIRECWAY system.

- General Help Topics
- Introducing DIRECWAY Navigator
- Introducing Turbo Internet
- Introducing Diagnostics
- Troubleshooting
- DIRECWAY Glossary
- Contact Information
- System Information

myDIRECWAY.com The myDIRECWAY.com website gives you convenient access to everything DIRECWAY related. It offers online support, software downloads, 10 channels of commercial free music, and an array of other useful resources aimed at enhancing your DIRECWAY experience.

Figure 64: myDIRECWAY main menu

Some of the features available on the myDIRECWAY.com website include:

- Email Options - Create DIRECWAY Email accounts or change your email password.
- Satellite Speed Test - Accurately measure your satellite connection speeds.
- Billing & Invoices - View your billing information and invoices online.

- Downloads - Get the latest DIRECWAY software, updates and tools.
- Access to chat and email support.
- DIRECWAY Radio - Listen to 10 channels of crystal-clear, commercial free music and still maintain your high-speed Internet performance. Multicast technology makes it possible and it's only available via satellite.
- Instant Support - **ERICA**, our 24 x 7 virtual online support agent, as shown in Figure 66, can help you with questions about your DIRECWAY service.

To access the **Help Center** from the main menu, click **Help**.

Figure 65: Help Center tools on myDIRECWAY.com

To access ERICA, click **Instant Support** on the Help Center menu. After ERICA launches, type in your question and follow the instructions that appear.

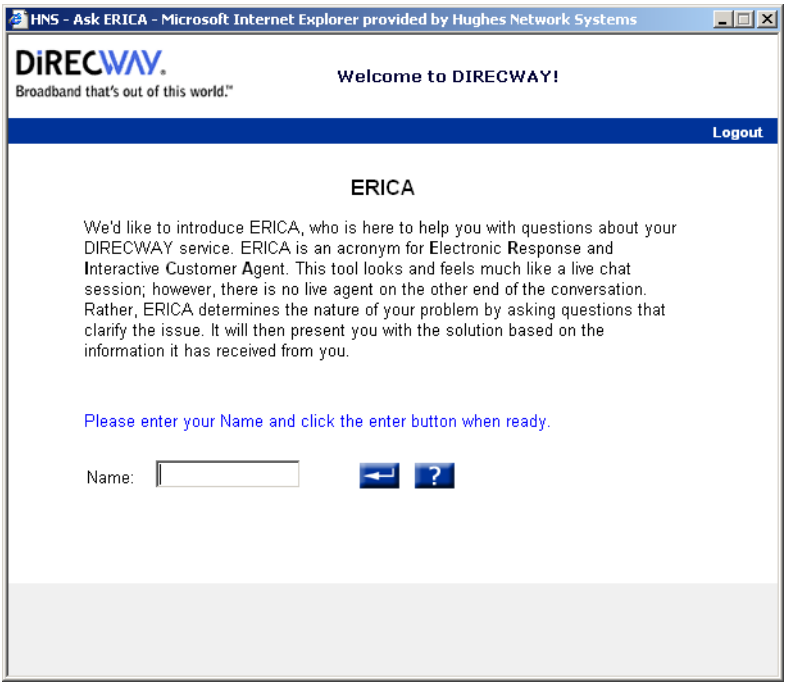

HNS - Ask ERICA - Microsoft Internet Explorer provided by Hughes Network Systems
DIRECWAY
Broadband that's out of this world.
Welcome to DIRECWAY!
Logout
ERICA
We'd like to introduce ERICA, who is here to help you with questions about your DIRECWAY service. ERICA is an acronym for Electronic Response and Interactive Customer Agent. This tool looks and feels much like a live chat session; however, there is no live agent on the other end of the conversation. Rather, ERICA determines the nature of your problem by asking questions that clarify the issue. It will then present you with the solution based on the information it has received from you.
Please enter your Name and click the enter button when ready.
Name:

Figure 66: ERICA main menu

Go to myDIRECWAY.com now! If you're a first time user, you will be asked to join.

Using DW email

To use DIRECWAY Email, you will need to create a DIRECWAY Email account and also configure the email client program that you will be using. The myDIRECWAY.com website is your source of information for DIRECWAY Email setup, email client configuration, and other email related questions. The following procedures will assist you in using your DIRECWAY Email.

Manage Email Account

1. Go to myDIRECWAY.com.
2. Click Email options located in the HELP CENTER.
3. Create Email account, change Email password, and perform other Email options.

Configure Email Client

1. Go to myDIRECWAY.com.
2. Click Instant Support located in the HELP CENTER.
3. Note: This launches ERICA, our 24x7 virtual online support agent.
4. Enter your name in the Name field.
5. Enter How to configure my email client and follow the instructions that appear.

FAQs

1. What is the difference between WebSetup and registering?

WebSetup is the program used to register your satellite modem. You need to **register** your satellite modem receiver before using the system for the first time.

2. What is the difference between DIRECWAY and DirecPC?

DIRECWAY is the evolution of DirecPC. As we make the brand name transition, you may see occasional references to both brand names. Be assured that all documentation, hardware, and software is up to date and fully enabled.

3. What do I do if my DW icon doesn't appear in the system tray?

If your **DW** icon doesn't appear in your system tray when you start your computer, select **Start**→*Programs*→*DIRECWAY* and select *Navigator* to launch the **DW** icon.

4. What geographic area is covered by the service?

As of this printing, the 48 continental states are covered by the service. Check our Web site, **www.mydirecway.com**, to see the current coverage area.

5. Where can I get the latest version of the software?

Software upgrades are posted on our Web site, **www.mydirecway.com**, when available. Please check the Web site often.

6. Can I use the same dish for my DIRECWAY™ service and my DIRECTV® services?

Yes, the system has an upgrade kit that you can install on your existing dish in order to receive DIRECTV services.

7. Why is there a requirement that the satellite dish be professionally installed?

Because the two-way system uses a transmitter, not just a receiver. Professional installation ensures that the system complies with FCC requirements and is installed in a location or manner that is not readily accessible to children and that the satellite dish is fine-pointed for transmission and does not interfere with other satellite users.

8. If the system transmits and receives via satellite, why do I need a telephone modem?

You may need a telephone modem only to commission your satellite modem for the first time, when the telephone modem may be required to run WebSetup if Satellite Based Commissioning is not available. After your system is commissioned, a dial-up connection is not needed for your system to operate. However, a telephone modem may be used to establish a dial-up connection to the Internet as a backup. A dial-up ISP account for this purpose is available.

9. What are the causes of interference in the operation of my system?

The DIRECWAY system operates in the Ku band. Other devices transmitting in this band, such as radar detectors, can interfere with the system.

10. How can I add more e-mail accounts after commissioning?

Run **WebSetup**: select **Start** → *Programs* → *DIRECWAY* and click **WebSetup** to manually launch it. For Windows XP, select **Start** → *All Programs* → *DIRECWAY* and click **WebSetup.** Skip to the section dealing with e-mail accounts (see page 33).

11. Why does Windows ask for a password each time I restart my computer now that I installed the software? How can I change this?

In order to complete WebSetup, the software had to install **Client for Microsoft Networks**. Windows makes Client from Microsoft Networks the **Primary Network Logon** by default. The following steps stop Windows from asking for a password by changing your Primary Network Logon to **Windows Logon**.

1. Right-click the **Network Neighborhood** icon found on your desktop. The menu in Figure 67 is displayed.

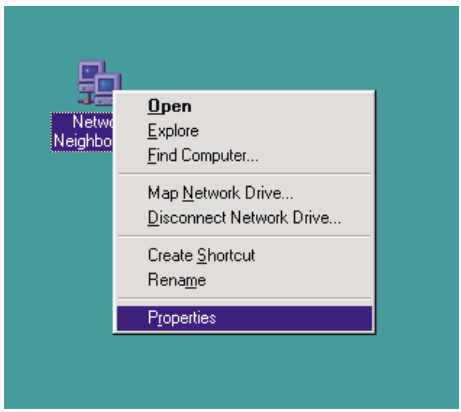


Figure 67: Right-click Network Neighborhood

2. Select **Properties**. The **Network Properties** dialog box appears. See Figure 68.

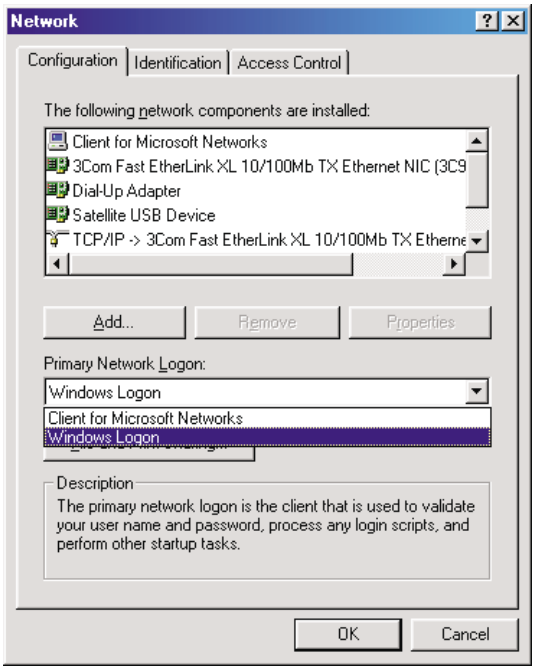


Figure 68: Network properties dialog box

3. Click the **Primary Network Logon** box. A dropdown list appears.
4. Select **Windows Logon**.
5. Click **OK**. If you are using the Windows asks for additional files, either insert your Windows CD or follow the procedures outlined in step 6 on page 23 to find the *.cab* files and point the software to that location.
6. A dialog box appears asking if you want to restart your computer. Click **Yes**.

12. How do I install Dial-up Networking on my computer if it is not installed?

If you receive an error message during WebSetup stating that Dial-up Networking is not installed, install it using the following steps.

1. Select **Start**—*Settings*—*Control Panel.*
2. Double-click the **Add/Remove Programs** icon. See Figure 69. The Add/Remove Program Properties dialog box appears.

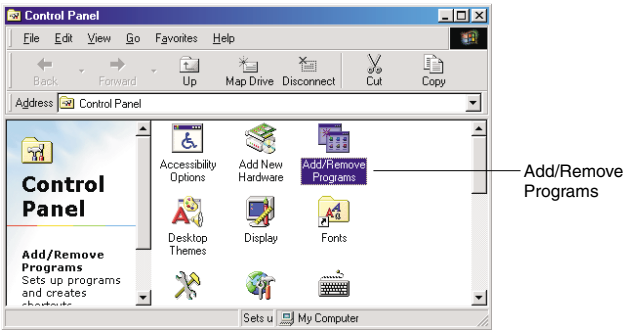


Figure 69: Double-clicking the Add/Remove Programs icon

3. Click the Windows Setup tab. See Figure 70.

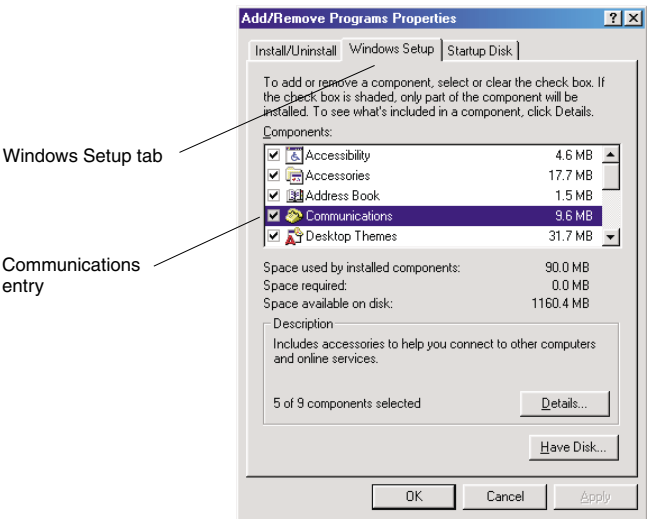

Add/Remove Programs Properties
Install/Uninstall
Windows Setup
Startup Disk
To add or remove a component, select or clear the check box. If the check box is shaded, only part of the component will be installed. To see what's included in a component, click Details.
Components:
Accessibility 4.6 MB
Accessories 17.7 MB
Address Book 1.5 MB
Communications 9.6 MB
Desktop Themes 31.7 MB
Space used by installed components: 90.0 MB
Space required: 0.0 MB
Space available on disk: 1160.4 MB
Description
Includes accessories to help you connect to other computers and online services.
5 of 9 components selected
Details...
Have Disk...
OK
Cancel
Apply
Windows Setup tab
Communications entry

Figure 70: Add/Remove Programs Properties Window

4. Double-click the **Communications** entry. The Communications Properties dialog box appears. See Figure 71.

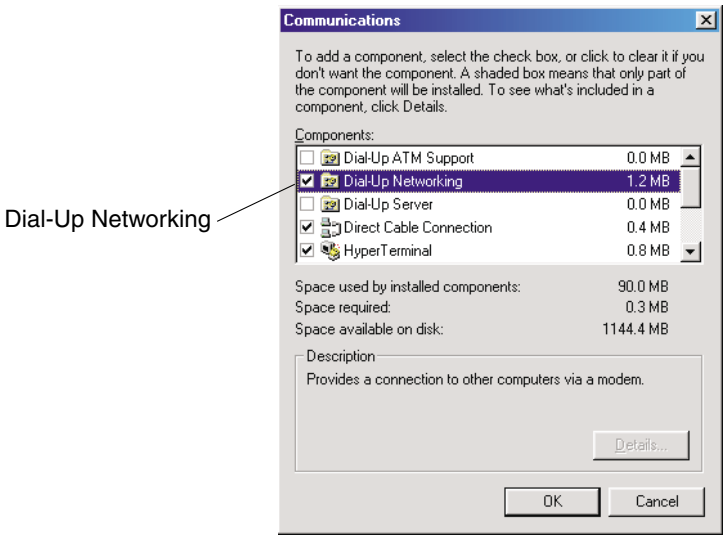

Dial-Up Networking
Communications
To add a component, select the check box, or click to clear it if you don't want the component. A shaded box means that only part of the component will be installed. To see what's included in a component, click Details.
Components:
Dial-Up ATM Support 0.0 MB
Dial-Up Networking 1.2 MB
Dial-Up Server 0.0 MB
Direct Cable Connection 0.4 MB
HyperTerminal 0.8 MB
Space used by installed components: 90.0 MB
Space required: 0.3 MB
Space available on disk: 1144.4 MB
Description
Provides a connection to other computers via a modem.
Details...
OK
Cancel

Figure 71: Communications Properties dialog box

5. Click **Dial-Up Networking** to place a check in the box.
6. Click **OK** twice.
7. If Windows asks for additional files, either insert your Windows CD or follow the instructions on step 6 on page 23. Those instructions describe how to find the *.cab* files and point the software to that location.
8. Allow Windows to restart your computer.

13. What is Automatic Cross Polarization (ACP)?

The ACP feature provides transmit satellite dish pointing information to your installer and automatic satellite dish revalidation. This ensures your satellite dish remains aligned.

Satellite systems with transmit capability — the ability to send data directly to the Internet via the

satellite without a telephone connection — need to be checked periodically to be sure that the satellite dish alignment remains correct. Satellite dishes may become misaligned because of structures settling, unauthorized tampering or, more commonly, high winds.

If the satellite dish alignment is not correct, transmissions from your equipment might interfere with other users of the satellite, and your signal might be weak.

The means used in the satellite industry to check transmit satellite dish alignment is **cross polarization co-polarization isolation measurement** or **cross pol** for short. Until recently cross pol measurements could only be made by satellite maintenance personnel.

Your ACP-equipped system can enter a test mode and initiate an automatic cross pol test session between your satellite dish and the National Operations Center (NOC). The test is performed by firmware in the satellite equipment, not on your PC. Since your PC is not involved, the test cannot compromise the security of your system.

If your equipment fails a periodic test, you will be contacted to schedule a service call. Other ACP features such as the Antenna Pointing - Transmitter screen (Figure 44 on page 42) are utilized by satellite service personnel to increase the accuracy of satellite dish alignment.

14. Why is the Turbo Internet Properties screen displayed when I try to access the Internet in terrestrial mode?

The **Turbo Internet Properties** screen must be completed to enable your system to dial out. If it is displayed, it was not properly completed during registration. Follow the steps given below.

1. Right-click the **DW** icon, then select **Turbo Internet Properties**.

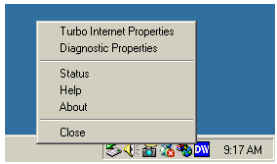


Figure 72: Right click the icon

2. The **Turbo Internet Properties** window is displayed (see Figure 73). Click the **General** tab. Under the Auto Connect section, select **Automatically connect for any Internet access** to enable the software to automatically connect when using the Internet.

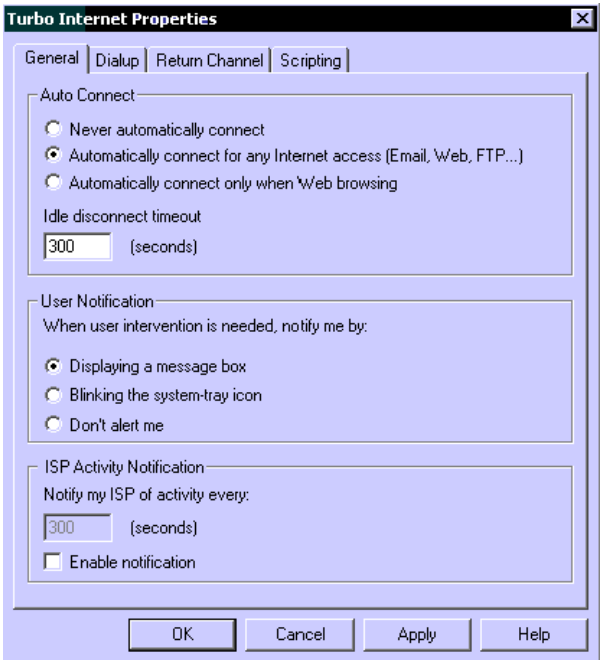


Figure 73: Enabling system to dial out

3. Click the **Dialup** tab (Figure 74). Enter your **user name** and **password** if one is not already present.

4. Enter the **area code** and **phone number** of your ISP. If you chose to have DIRECWAY as your ISP, click the dropdown list in the POP Number box and select a number near you. The software automatically populates the **Phone Number** and **Area Code** fields.
5. . Click **OK**.

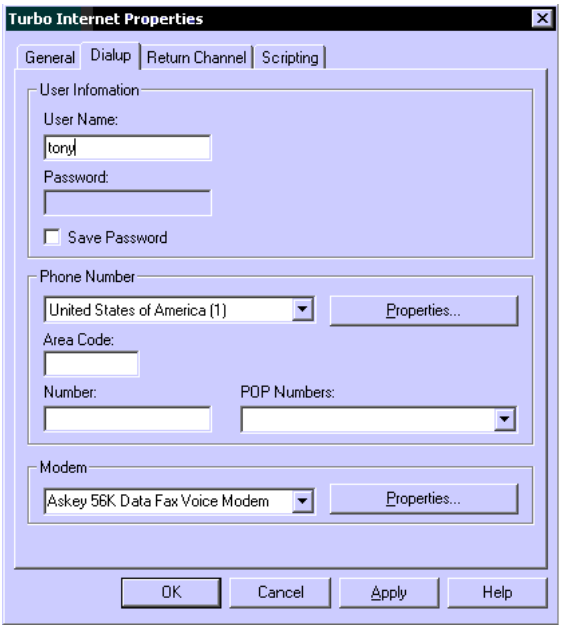


Figure 74: Dialup tab on the Turbo Internet Properties window

Note: Some computers may have a modem detection problem and be unable to surf. See page 76 for instructions on how to correct this problem.

15. How can I ensure that the system will fall back to a modem or terrestrial link in case of satellite failure?

The appropriate option on the Return Channel tab of the **Turbo Internet Properties** screen must be

completed to enable your system to use an alternate route in case of satellite failure. Do the following:

1. Right-click the **DW** icon, then select **Turbo Internet Properties**.

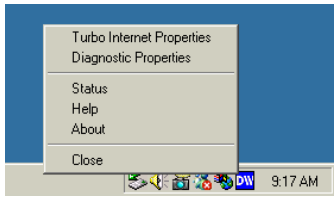


Figure 75: Right click the icon

2. The **Turbo Internet Properties** window is displayed. Click the **Return Channel** tab (see Figure 76). Under the Return Channel Mode section, select **Use satellite for primary return channel but automatically fallback to modem or other terrestrial link if satellite return channel is not available** to enable alternate route in case of satellite failure.

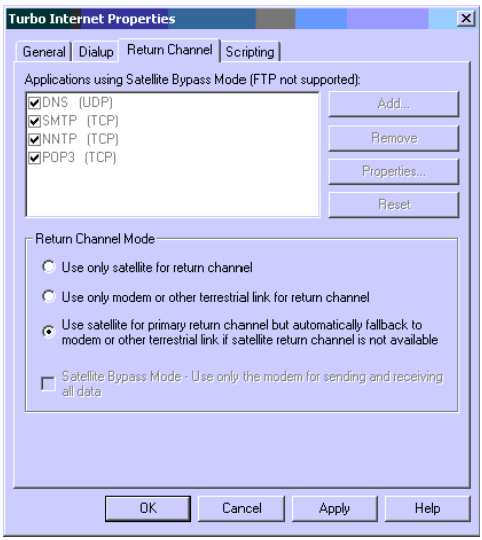


Figure 76: Return Channel tab on the Turbo Internet Properties window

Correcting the modem detection failure

In some PC configurations, the DIRECWAY software cannot detect the installed telephone modem and you will receive an error message as shown in Figure 77. If this error message is displayed, click **OK**. and follow the steps below

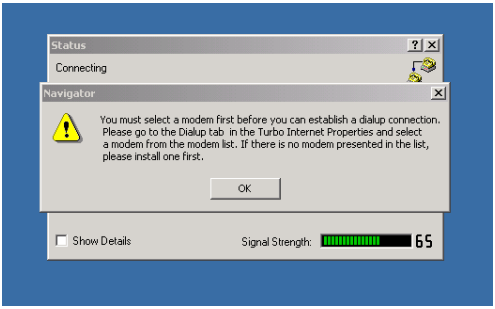

Status
Connecting
Navigator
You must select a modem first before you can establish a dialup connection. Please go to the Dialup tab in the Turbo Internet Properties and select a modem from the modem list. If there is no modem presented in the list, please install one first.
OK
Show Details
Signal Strength:
65

Figure 77: Modem detection failure notice

1. The **Dialup** tab of the Turbo Internet Properties screen will open. The modem listed is not being properly detected, even though the correct modem may be listed in the field as shown in Figure 78.

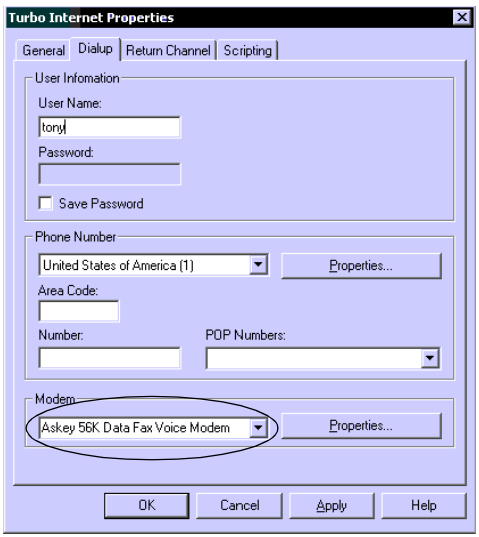


Figure 78: Displaying modem on Turbo Internet screen

2. Click the modem selection arrow and select **your correct modem**.
   Note: Your correct modem may **appear** to be already selected. You must **reselect** it to correct this problem
3. The **Apply** button will become active when you make a selection. Click **Apply** to save the changes and **OK** to close the Turbo Internet Properties page as shown in Figure 79.

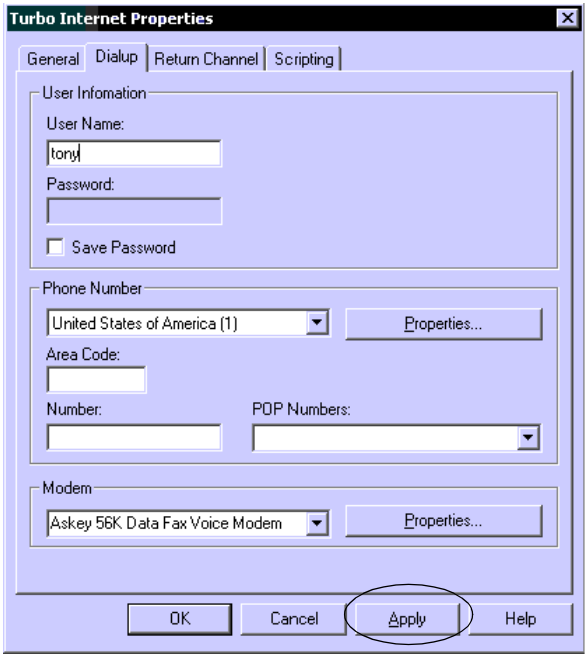


Figure 79: Applying modem selection on Turbo Internet screen

Attempt to surf the Internet to verify that the modem detection problem has been corrected.

Modem

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment power off and on, the user is encouraged to try to correct the interference by one or the following measures:

- Reorient or relocate the radio or television antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

Antenna

Professional installation of the antenna is required for the Satellite Return System.

Limited warranty

Hughes Network Systems, Inc. (HUGHES) warrants to the original buyer that under normal use and wear the Hardware will be free from defects in material and workmanship for a period of one (1) year from the date of purchase. HUGHES also warrants to the original buyer that when properly installed and used in accordance with its documentation, the Software will perform substantially in accordance with its specifications for a period of one (1) year from the date of purchase. Any Hardware or Software replaced or repaired under this warranty will be warranted for the remainder of the original warranty period or thirty (30) days, whichever is longer. Any implied warranties relating to the Hardware or Software are limited to a period of one (1) year from the date of purchase. Some states do not allow limitations on duration of an implied warranty, so the above limitations may not apply to you.

Customer remedies

If under normal use and wear, the Hardware becomes defective in materials or workmanship and or the Software fails to perform substantially in accordance with its specifications and is returned at your expense to one of the HUGHES Authorized Service Centers with a copy of your receipt during the warranty period set forth above, HUGHES shall at its option, and at its expense, either (a) within thirty (30) days after the date of return of the defective Hardware or Software, repair or replace the defective Software or Hardware to cause it to comply with the terms of HUGHES' Limited Warranty, or (b) if repair or replacement is not commercially practicable, return the price paid by you for the defective Hardware or Software.

Reconditioned replacement components, parts, units or materials may be used if the Hardware is repaired or replaced. This Limited Warranty will be void in its entirety if the Hardware or Software is serviced by anyone other than HUGHES or a HUGHES Authorized Service Center. This Limited Warranty does not cover the following kinds of failures or defects: failures or defects in products or accessory equipment or software not manufactured or provided by HUGHES; failures or defects in any Hardware or Software caused by misapplication, misuse, abuse, accident, alteration or neglect; improper or incorrect installation, removal or repair of Hardware or Software; failure to follow instructions; fire, flood, wind, lightning, earth-quake or other acts of God; spills of food or liquids; normal wear and tear; improper Hardware or Software installation, maintenance, operation or repair; failures or defects in any Hardware or Software when used in combination with other products or equipment not manufactured or provided by HUGHES; payments for labor or service to representatives or service centers not authorized by HUGHES. HUGHES neither assumes nor authorizes any Authorized Service Center or any other person or entity to assume any other obligation or liability beyond that which is provided for in this Limited Warranty.

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Hughes Network Systems, Inc., 11717 Exploration Lane, Germantown, MD 20876

Declaration of conformity

Declaration of Conformity

Standards to which Conformity is declared: FCC Part 15

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Responsible Party's name:	Hughes Network Systems, Inc
Address:	Germantown, Maryland
Telephone:	866-DIRECWAY (347-3292) www.DIRECWAY.com
Trade Name:	HUGHES
Type of Equipment:	Satellite Transmit and Receive Modem
Model Numbers:	3006161-XXXX, 3003162-XXXX

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5,652,795, 5,699,384, 5,995,725, 5,995,726, 6,016,388,
6,125,184, 6,131,160, and 6,161,141.
Other U.S. and foreign patents pending.

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Revision C